FREIGHT TRAFFIC ISSUE

How Shippers Rate RR Freight Ads

September 28, 1959

RAILWAY AGE *weekly*

McCARTNEY LIBRARY
GENEVA COLLEGE

Baltimore: PRR grooms tunnels for piggyback

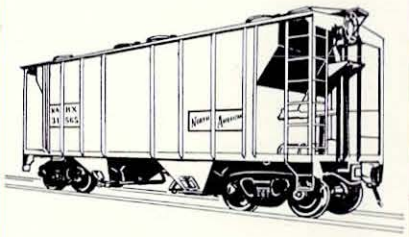
Microwave

New uses spark fast growth

RDS9 1116
McCARTNEY LIBRARY
GENEVA COLLEGE
BEAVER FALLS PA

60 cents A Simmons-Boardman TIME-SAVER Publication

DON'T LET "SPOT SHORTAGES" TIE YOU UP!



CHECK THESE ADVANTAGES

1. Control handling and routing of loaded and empty movements.
2. Car requires no expensive cleaning operation before loading.
3. No customer complaints about condition of lading.
4. Car can be unloaded pneumatically or by gravity.

Contact us today

LEASE YOUR COVERED HOPPERS

for a constant supply of cars

You can't afford to put up with continued "spot shortages" of covered hoppers—because competition won't let you. Lease from North American and you have control of routing and positive return of empties to loading points.

Your continuous car supply allows better planning, improved service and most important—satisfied customers. Let us figure with you and show how little, if anything, leased cars may cost. These cars can be equipped for pneumatic unloading with 5-inch airlines, and adaptors are available for larger or smaller diameter airlines. Ask for a test demonstration.

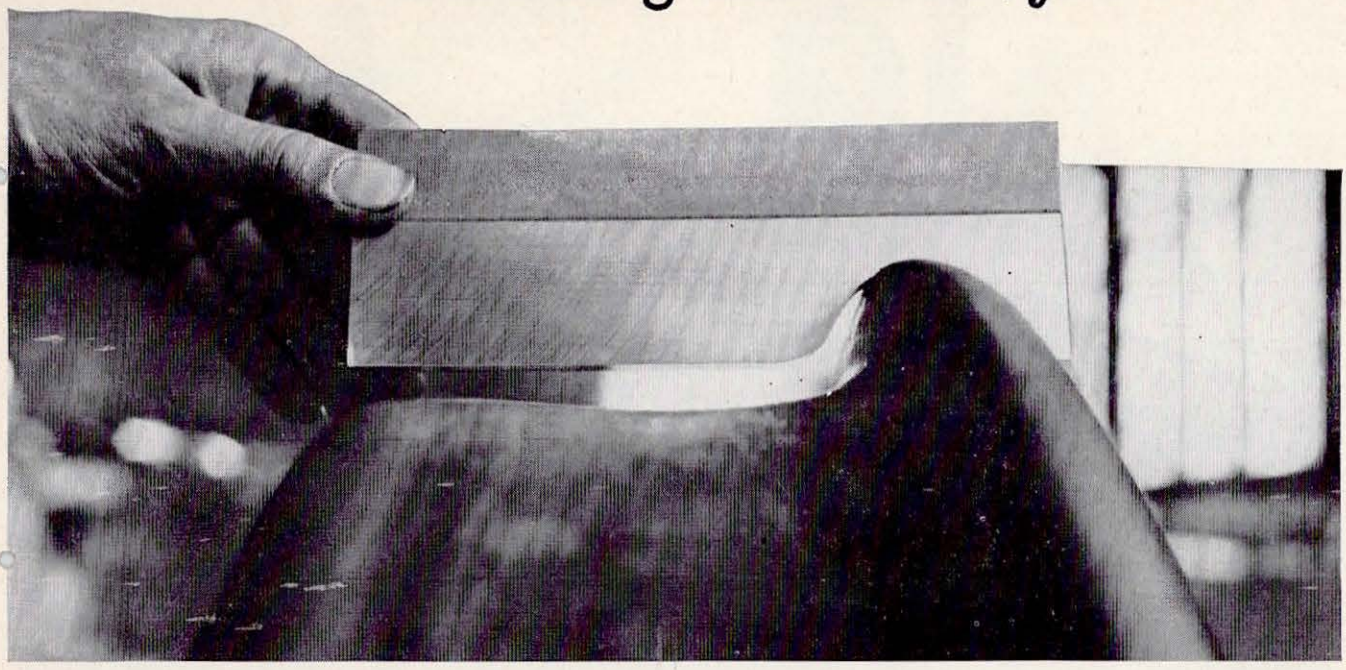
for full information phone, write or wire

NORTH AMERICAN CAR CORPORATION

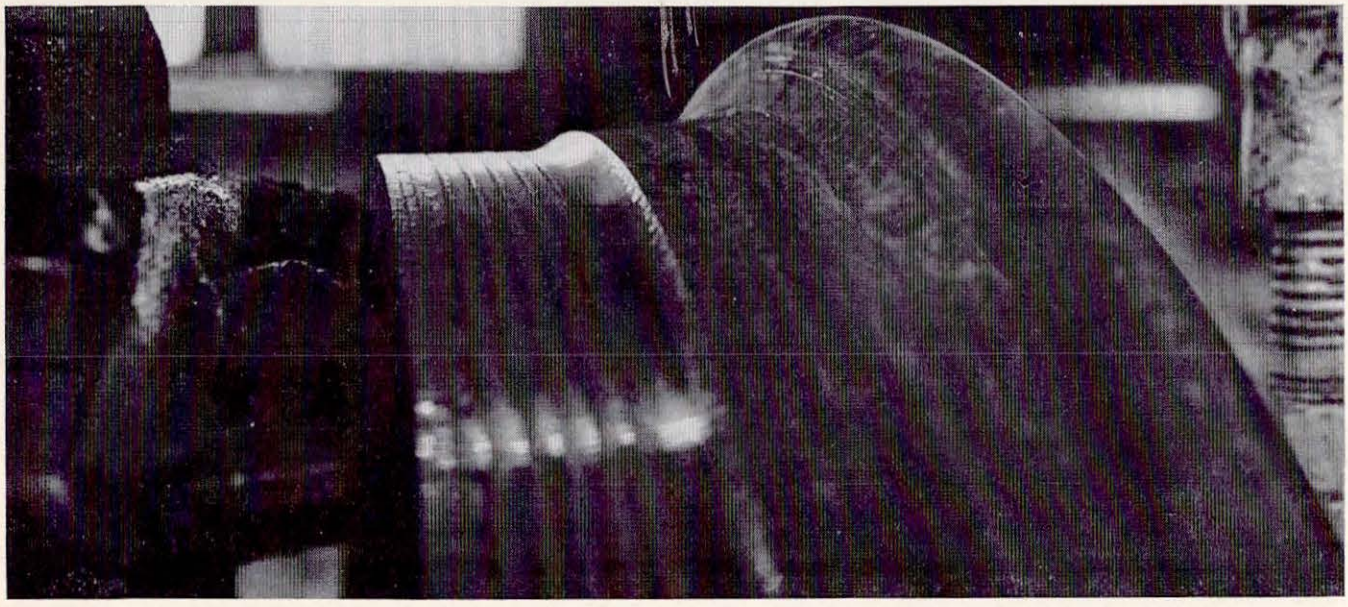
231 South La Salle Street, Chicago 4, Illinois • Telephone FInancial 6-0400

Remember, if it's NEW, it's *NORTH AMERICAN*

Instead of condemning this wheel, you can--



TURN IT INTO THOUSANDS OF EXTRA MILES OF LIFE



Of all the freight car wheels that hit the scrap pile, about 60 pct are condemned because of thin flanges. But with Bethlehem one-wear wrought steel wheels, you can usually gain thousands of extra miles of wheel service—by the simple process of turning new tread and flange contours on a wheel lathe. That's because Bethlehem wheels generally have more than enough metal in the rim to permit turning and still meet AAR Interchange Rules.

Caution: The Rules do not permit turning of *all* types of wheels. To be on the safe side, standardize on Bethlehem one-wear wrought steel wheels. That will put you on the side of true economy too; the extra life gained by wheel-turning far outweighs any small price differential with cheaper wheels which cannot be turned.

When you're concerned with economy and quality, why not get both? And you can, with Bethlehem wrought-steel wheels. You can buy them with assurance.

BETHLEHEM STEEL COMPANY
BETHLEHEM, PA.

Export Distributor: Bethlehem Steel Export Corporation

BETHLEHEM STEEL

BETHLEHEM STEEL

How electronics help you to sell your railroad's shipping service

Dependable delivery is any railroad's strongest selling point. And the surest, most economical way to *improve* your delivery schedules is with electronic control equipment made by Union Switch & Signal.

Save time. Union Centralized Traffic Control speeds schedule time by minimizing delays in high traffic territory. It eliminates many possibilities for error. It enables you to move *more traffic* over existing trackage.

Improve service. The Union Velac® Automatic Classification Yard System helps you improve service to shippers, too. It saves time in train classification . . . usually several hours per car, compared to manual yards. Most important, it cuts damage to lading because the Velac System precisely and automatically controls coupling speed. The Velac System handles cars so gently that even fragile ladings can be humped safely.

Pays for itself. Union Control Systems do such a tremendous job of improving railroad efficiency that they actually *pay for themselves* in reduced operating costs in just a few years. You can expect a return on investment of 15 to 30% when you install a Union Control System. And every day that it is working, it is helping you to *sell your railroad* because it is helping you to improve your service to shippers. Get complete information from any Union Switch & Signal representative.

"Pioneers in Push-Button Science"

UNION SWITCH & SIGNAL

DIVISION OF WESTINGHOUSE AIR BRAKE COMPANY

SWISSVALE, PENNSYLVANIA

NEW YORK . . . . PITTSBURGH . . . . CHICAGO . . . . SAN FRANCISCO

RAILWAY AGE *weekly* September 28, 1959 • Vol. 147, No. 28

Week at a Glance

Departments

Damage Reducer 18
Freight Car Loadings 51
Freight Operating Statistics . 48
Industrial Traffic 42
Letters from Readers 26
New Equipment 51
New Products Report 22
People in the News 42
Railroading After Hours 20
Railway Market 51
Shippers' Guide 44
Supply Trade 42
The Action Page 58
Traffic Poll 13
Traffic Publications 44
Watching Washington 10
You Ought to Know 56

• Editorial and Executive Offices New York 7, 30 Church St.

JAMES G. LYNE, Editor
ROBERT G. LEWIS, Publisher
Executive Editor .... Joe W. Kizzia
Managing Editor .... Fred C. Miles
News Editor ..... Luther S. Miller
Traffic-Transportation..G. C. Hudson
Mechanical
C. L. Combes F. N. Houser, Jr.
Signaling & Communications
Robert W. McKnight Robert J. Barber
Associate Editors
Rod Craib Harry M. Grayson, Jr.
Librarian ..... Edith C. Stone
Editorial Assistant .... June Meyer
Art Director .... Russell F. Rypsam
Design and Layout .. Joel Petrower
Production Manager..Joseph J. Menkes

• Chicago 3, 79 West Monroe St.
Western Editor ..... Gus Welty
Mechanical .... Norman E. Gillespie
Engineering ..... M. H. Dick
R. E. Dove E. W. Hodgkins, Jr.
Purchasing and Stores .. Bert Enos
Editorial Assistant .. Wanda Brown

• Washington 4, National Press Bldg.
Washington Editor . Walter J. Taft

Railway Age, established in 1856, is indexed by the Business Periodicals Index, the Engineering Index Service and the Public Affairs Information Service. Name registered in U.S. Patent Office and Trade Mark Office in Canada.

Published weekly by the Simmons-Boardman Publishing Corporation at 440 Boston Post Road, Orange, Conn. Second-class postage paid at the Post Office at Orange, Conn. James G. Lyne, chairman of the board; Arthur J. McGinnis, president and treasurer; Duane C. Salisbury, executive vice president; George Dusenbury, vice president and editorial and promotion director; Robert G. Lewis, Joe W. Kizzia, M. H. Dick, M. J. Figa, R. C. Van Ness, vice presidents.

Wage fight gains momentum ..... p. 9

This year's wage talks are opening with one of the widest gaps ever between union wage demands and management counter-proposals. The railroads have now served both the operating unions and the non-ops with wage-cut proposals.

Cover Story—How shippers rate RR advertising p.13

They think it's good, according to this month's Traffic Poll, but that it could be better. Railroad advertising, say the shippers, should emphasize special services (like car tracing, car reporting and damage prevention), schedules and routes.

Parts loss hurts RRs and shippers p.14

Consignor-consignee carelessness with removable damage-reducing gear costs railroads thousands of dollars annually. The best answer to the problem seems to be a continuing program of education.

Share knowledge, M/E men told p.28

Pooling of new ideas can help solve major railroad problems, ACL President Rice tells Coordinated Mechanical Associations meeting.

Cover Story—PRR grooms tunnels for piggyback p.35

A whole new territory is being opened to through piggyback service as the Pennsylvania increases clearances in four of its tunnels.

Cover Story—Microwave grows fast p.38

Modern microwave equipment can be used in a wide range of assignments, including many of direct benefit to shippers. Within the next two years, microwave installations on U.S. and Canadian railroads will more than double.

New transport study: 'Slow but thorough' p.52

The director of the Senate study, Maj. Gen. John P. Doyle, is putting thoroughness before speed as the long-delayed inquiry finally gets under way.

The Action Page—Are executives paid enough? p.58

Railroad directors have no more important duty than that of attracting and holding competent managers. The duty cannot be well performed without knowing what adequately attractive pay has to be.

Sparton TRI-BELT... loading systems

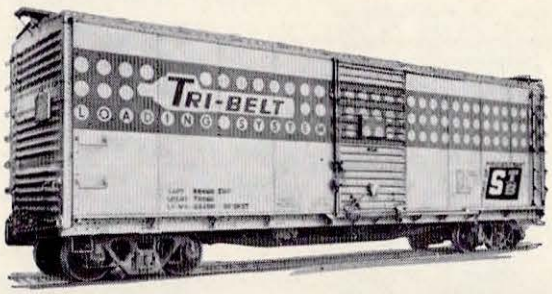
Mark of GOOD SHIPPERS Everywhere!

"SIGN OF PROTECTION"

ST EQUIPPED B

Good Railroads demand the best. They want their "good shippers" to transport their merchandise with the knowledge and assurance it will arrive in good condition.

With TRI-BELT, day after day cargoes are shipped "without damage". This remarkably simple loading system—carrier approved—cuts loading and unloading time—and reduces damage claims to the vanishing point. It delivers more salable merchandise to point of destination. Request a TRI-BELT equipped car for your merchandise—know the savings all ways. Write today for complete data and list of railroads now providing TRI-BELT equipped car service.



SPARTON RAILWAY EQUIPMENT Division Sparton Corporation
17333 HEALY AVE. • DETROIT 12, MICH.

Week at a Glance CONT.

Current Statistics

Operating revenues	
7 mos., 1959	$5,847,512,418
7 mos., 1958	5,329,684,214
Operating expenses	
7 mos., 1959	4,562,546,451
7 mos., 1958	4,353,181,571
Taxes	
7 mos., 1959	632,589,611
7 mos., 1958	502,477,821
Net railway operating income	
7 mos., 1959	462,965,823
7 mos., 1958	300,654,566
Net income, estimated	
7 mos., 1959	337,000,000
7 mos., 1958	203,000,000
Average price railroad stocks	
Sept. 22, 1959 ..	100.55
Sept. 23, 1958 ..	107.48
Carloadings revenue freight	
37 wks., '59	22,139,492
37 wks., '58	20,824,937
Freight cars on order	
Sept. 1, 1959 ...	37,172
Sept. 1, 1958 ...	25,611
Freight cars delivered	
8 mos., 1959	27,435
8 mos., 1958	32,533

Advertising Sales Department

Duane C. Salisbury—director of sales

New York 7, N. Y., 30 Church st.,
WOrth 4-3060
J. S. Vreeland—vice president;
F. T. Baker—district manager;
J. C. Lyddy; W. E. Glasby

Chicago 3, Ill., 79 W. Monroe st.,
RAndolph 6-0794
J. R. Thompson—vice president;
J. W. Crossett—district manager;
Hale Carey

Cleveland 15, Ohio, 1501 Euclid ave.,
MAin 1-4455
H. H. Melville—vice president;
H. M. Blunt—district manager

Philadelphia, Pa., Jericho Manor,
Jenkintown, Pa., TUrner 7-4526
W. E. Glasby—district manager

Pittsburgh 19, Pa., Suite 203, Carlton House
GRant 1-8186
C. J. Fisher—district manager

Atlanta 9, Ga., 22 Eighth st., N. E.,
TRinity 2-6720—J. S. Crane

Dallas 19, Tex., 3908 Lemmon ave.,
LAkeside 2322—Joseph Sanders

Los Angeles 17, Cal., 1336 Wilshire blvd.,
HUbbard 3-0390
Bayne A. Sparks—vice president

San Francisco 11, Cal., 244 California st.,
EXbrook 7-4990
D. S. Clark—district manager

London E.C.1, Eng., 8/9 Clerkenwell Green
Sibley-Field Publishing Co., Ltd.

Frankfort am Main (16), West Germany
Wittelsbacher Allee 60
Georg J. Linder,
Continental European Representative

Tokyo, Japan
Shadan Hojin, 14
2-Chome Marunouchi
George E. Olcott

Subscription to railroad employees only in U.S. possessions, Canada and Mexico, $4 one year, $6 two years, payable in advance and postage paid. To railroad employees elsewhere in the western hemisphere, $10 a year. In other countries, $15 a year. Single copies 60¢ except special issues. Address all subscriptions, changes of address, and correspondence concerning them to: Subscription Dept., Railway Age, Emmett St., Bristol, Conn.

Circulation Dept.: R. C. Van Ness, Director of Circulation, 30 Church St., New York 7, N. Y. POSTMASTER—SEND FORM 3579 to EMMETT ST., BRISTOL, CONN.

Printed at the Wilson H. Lee Co., Orange, Conn.

Short and Significant

Low-cost group travel . . .

will go into effect Oct. 1 on Canadian National and Canadian Pacific rail routes in Canada as an "off-season" inducement to passenger travel. In a move described by CNR as "an all-out assault on the huge intercity auto-travel market," the Canadian roads are slashing rail coach fares for two or more persons traveling together. In a simultaneous move, the two roads will begin selling a package for transcontinental travel that will include transportation, berths, meals and tips in a single fare.

Dome cars will be another selling point . . .

for rail travel between Chicago and Miami this winter. Two streamliners—IC's "City of Miami" and PRR's "South Wind"—will carry dome Pullmans. Each road is acquiring two cars through a Pullman Co. lease. It's a passenger-service "first" for both routes: the IC-CG-ACL-FEC run of the "City of Miami" and the PRR-L&N-ACL-FEC route of the "South Wind." The cars will be 4-roomette, 4-duplex-single-room, 4-double-bedroom units, with seats for 24 Pullman passengers in the dome.

Railroads are getting ready . . .

to offer all-rail service on iron ore moving from the Missabe Range to steel mills. They anticipate that such service may be called for when the steel strike ends if lake-rail routes are unable to handle the load—either because of the close of navigation or because of stepped-up volume. A meeting to discuss the matter was held recently in Chicago under auspices of the AAR's Car Service Division.

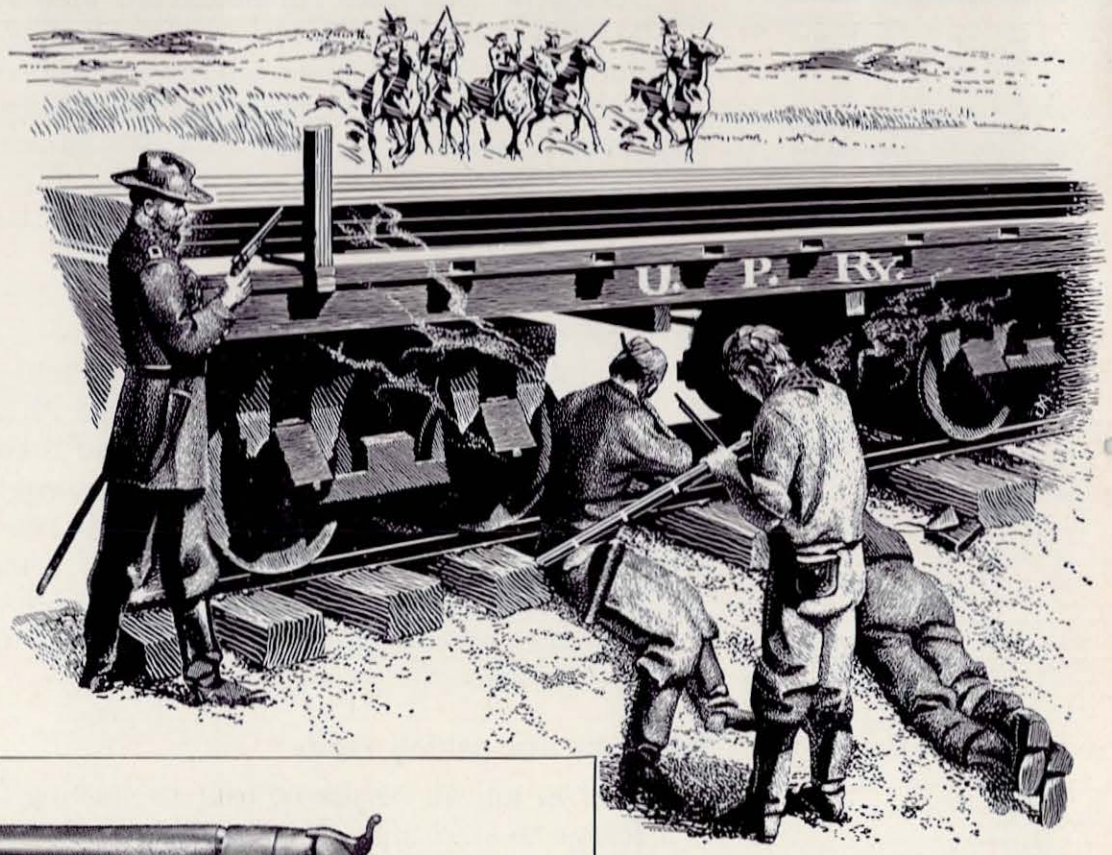
Government guaranty of a $40-million loan . . .

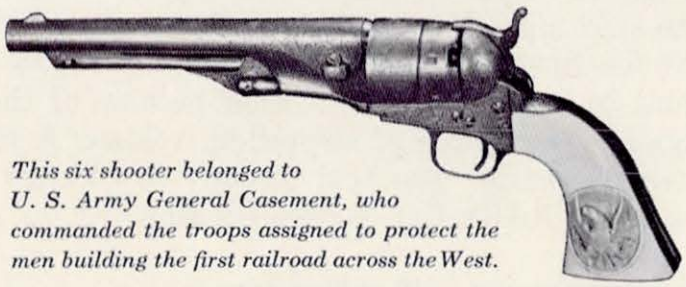
for the New York Central has been approved by the ICC. The loan will be made by eight of the nation's largest insurance companies, will be evidenced by a like principal amount of NYC's 5% collateral notes. NYC will use the proceeds to help construct three large electronic yards, certain centralized traffic control and other signal projects.

The revised Express agreement . . .

will become effective on schedule Oct. 1. This was assured when the ICC last week approved traffic-pooling arrangements involved—as requested in the application filed last July by the Railway Express Agency and participating railroads (RA, July 27, p. 79). The new agreement has an expiration date of Dec. 31, 1973. Its "broad objective," as the Commission put it, is "to facilitate contemplated improvements in service and place the express business on a profitable basis."

Rails opened the West





This six shooter belonged to U. S. Army General Casement, who commanded the troops assigned to protect the men building the first railroad across the West.

Opening the West through to the Pacific Coast, meant the beginning of a new era in America. As the supply line was established on Union Pacific, goods began to flow dependably.

Shippers on Union Pacific are provided a service second to none in the continuing leadership in the West. New types of equipment continue to be built for shippers' use. New track and new traffic controls improve the movement of trains.

Shippers also experience the progressive services of Union Pacific in the electronic car-reporting system, Transloading, and Trailer Freight.

Whenever you ship in or through the West, be specific, ship . . .

Union Pacific RAILROAD

UNION PACIFIC RAILROAD

Wage Fight Gains Momentum

► **The Story at a Glance: The railroads have served their biggest employee group—the non-ops—with proposals calling for a 15-cent-an-hour wage cut. The move follows the pattern set earlier by management's counter-proposals to the operating unions' wage demands. It also serves notice of an industry effort to bring the non-ops' pay scale in line with the straight-time hourly earings of production workers in other fields.**

Wage talks with three operating brotherhoods are already under way. Negotiations with the Trainmen, the Firemen and the non-ops will begin later this fall. Indications are that the wide spread between union demands and management replies will make for slow progress—if any—toward settlement of the disputes.

Employee wages, ordinarily the big item in contract negotiations, have run a poor second this year to the railroads' fight against featherbedding. But it could be a deadlock over money that produces the first industry-labor crisis. Seldom have management and labor approached the bargaining table with their initial proposals separated by such a wide margin.

With wage demands in from all but a few smaller organizations, the industry is faced with a staggering potential wage liability. The overall cost of new wage and fringe-benefit demands this year by the ops and non-ops has been estimated at $750,000,000 annually.

The Union Demands

Three operating unions—the BLE, ORC&B and SUNA—want 12%. The BRT and BLF&E are asking 14%. And the non-ops recently served notices calling for an additional 25 cents an hour. In all cases, present cost-of-living adjustments would be made a part of the basic rate before increases are added on. Management has countered each new demand with a pay-cut proposal.

The railroads clinched their stand last week by serving 11 non-operating unions with proposals embodying a 15-cent hourly wage reduction. (Previously, the carriers countered the non-ops' vacation-holiday demands with a 5-cent pay cut proposal.) About 550,000 of the industry's 846,000 employees are members of the 11 non-op organizations.

The non-ops, in addition to demanding a 25-cent hourly wage increase, are also seeking improvements in health and welfare benefits. Management, noting that the current hospital-medical-surgical insurance plan is entirely employee-financed, served notice that they'll insist it continue to be so financed.

Ted Short, chairman of the Western Carriers Conference Committee, said the wage reduction proposal is intended to restore the straight-time hourly earnings relationship between rail non-ops and production workers in all other industries. The proposed cut, he said, represents the amount by which wage increases for the non-ops have exceeded those for workers in industry generally since 1953.

(During the period 1953-59, hourly wage hikes for workers in general manufacturing have amounted to 43 cents. Those for non-ops have totaled 59 cents. Average straight-time hourly wage for workers in manufacturing was $2.16 as of July 1959. For the non-ops, earnings on the same basis totaled $2.37.)

Mr. Short also noted that railroad labor's recent wage gains have moved well ahead of the cost-of-living. Since 1953, he said, average straight-time hourly pay rates have increased 31½%, or more than four times the 7% increase in the consumers price index.

The conference committee chairman concluded that "the railroads have never found it more urgent to keep wage increases in line with realistic gains in employee productive effort so as to stabilize and, wherever possible, reduce the prices paid by the public for our service." Tremendous, steadily rising competitive pressures, he said, don't permit any other practical approach to the situation.

BAR Tests Bus Piggyback

A test piggyback loading of buses from the Bangor & Aroostook's Highway Division has been made. The BAR says that piggybacking of empty, dead-heading buses will bring substantial savings for its Highway Division, which operates many route-miles as a passenger common carrier over public roads in the State of Maine.

Labor Gets Moderation Plea

An appeal to railroad labor leaders for moderation on new wage proposals was made last week by President Daniel P. Loomis of the Association of American Railroads. Mr. Loomis spoke in Washington at the annual meeting of the American Short Line Railroad Association where the program also included an address by Chairman Tuggle of the ICC.

The AAR president deplored what he called the union's "indefensible wage demands and death-like grip on featherbedding work practices." He went on to declare that "labor can do the public no greater service than to start now to give more than lip service to the need to rein in on inflation."

Saying that railroading is at a "momentous, historic crossroads," Mr. Loomis called on "the entire million-man railroad family" to concentrate their efforts on three courses. The industry, he continued, must:

- Push relentlessly a crusade for a fair deal from government.
- Streamline plant and equipment even more and give shippers any kind of price that will hold and expand business.
- Come to grips with the plague of featherbedding that is "eating away the railroads' vitals," and build a "new structure of cooperative employee-manager relations."

Chairman Tuggle of the ICC touched upon the restricted routing issue which is of paramount interest to the short lines. He noted that some of the large trunk lines, "in tightening their belts to meet competition," have proposed to eliminate short lines from long-standing joint routes.

The ICC chairman conceded that in some situations such proposals are "desirable and lawful." He went on to say, however, that in other cases such proposals might threaten the continued operation of some short lines.

Then, Mr. Tuggle continued, "the public interest contemplated by the statute, I think, goes a little beyond the needs of particular carriers; it also embraces the highly important question of the need for continued rail service in the economic interests of the local points and communities served by the short line."

Watching Washington *with Walter Taft*

• **INCREASES** averaging more than 30% would be required if the the railroads undertook to put rates on commodities in the Products of Mines group on a fully-distributed-cost basis. On the same basis, rates on commodities in the Manufactures and Miscellaneous group would be cut more than 20%.

THAT'S A SHOWING of the latest burden-distribution study made by the ICC's Bureau of Accounts, Cost Finding and Valuation. The study is based on 1957 data derived from the 1% waybill sample being submitted to the Commission by the railroads.

IT ALSO SHOWS that Forwarder Traffic would be the only other commodity group to qualify for a cut (13.5%) if the fully-distributed-cost test were applied. Increases, in addition to that on Products of Mines, would be these: Products of Agriculture, 5.7%; Animals and Products, 3.2%; Products of Forest, 11.6%.

THE BUREAU EMPHASIZES that no part of the study's showing should be interpreted as justification for rate-making on the fully-distributed-cost basis. It notes how rates are designed to move traffic and yield revenues which make the largest possible contribution to "burden" or overhead. Thus, the ratios of revenues to out-of-pocket costs, as the bureau puts it, "have a rate-making significance which is not possessed by the ratios of revenues to fully-distributed costs."

THE RATIOS of revenues to out-of-pocket costs ranged from 169 for the Manufactures and Miscellaneous group to 111 for the Animals and Products group —a showing which indicates that each commodity group accounted for 1957 revenues exceeding its out-of-pocket costs. Detailed data by commodity classes and territorial movements, however, indicated that revenues from 196 movements of various commodities failed to yield out-of-pocket costs.

• **THE SAME SOLUTION** which he has often proposed for the car-shortage problem has been offered again by President Daniel P. Loomis of the AAR. He has told Senator Magnuson, chairman of the Senate's Interstate Commerce Committee, that the car-supply problem would "quickly disappear" if the railroads as a whole were in prosperous condition.

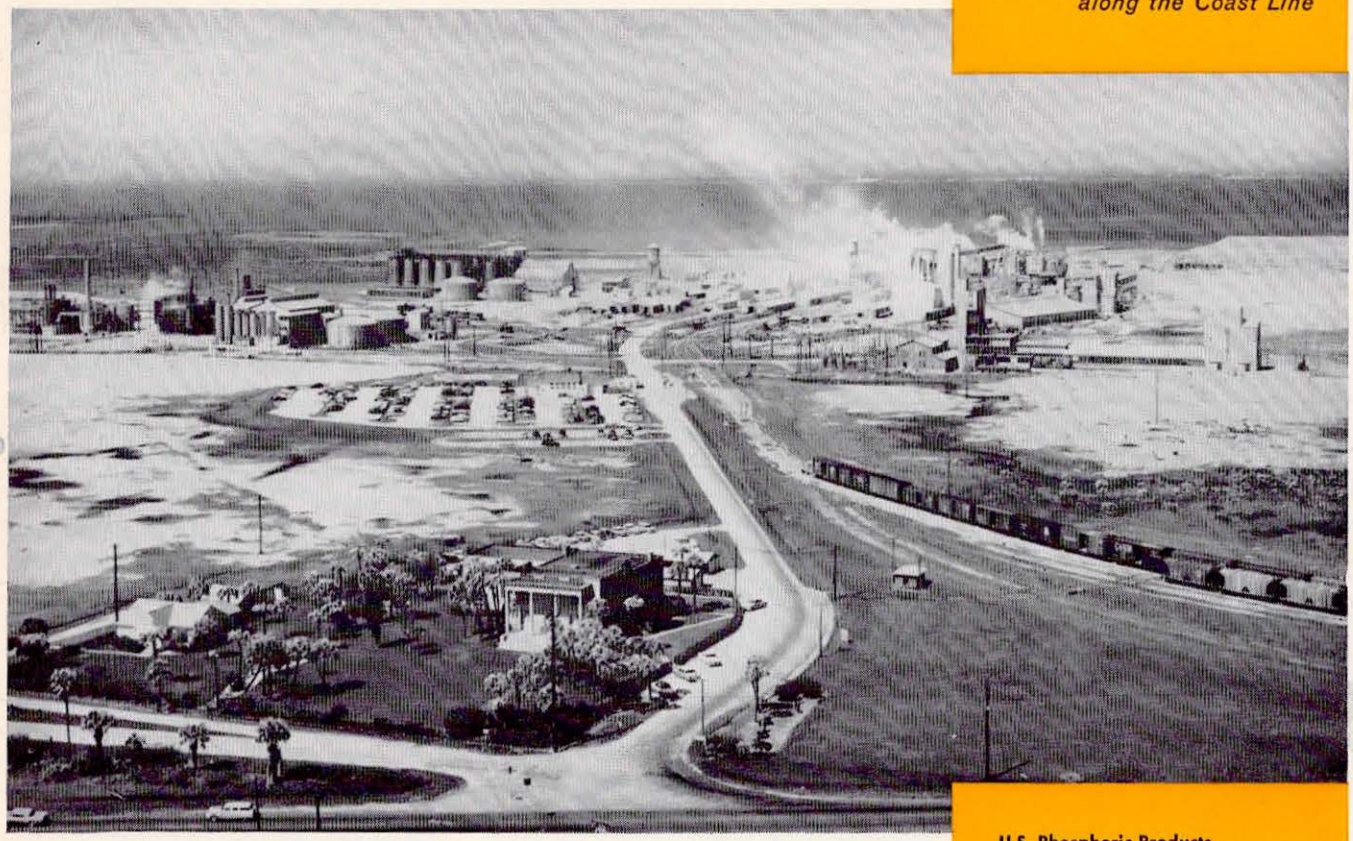
THE SENATOR HAD ASKED what had been accomplished by the committee of AAR directors which is studying the per diem problem. He was interested, he said, because Congress failed to act on the "incentive per diem bill," which would give the ICC authority to put an incentive factor into car-rental rates.

MR. LOOMIS REPORTED that the committee, having reviewed all old per diem proposals, is now studying "a variety of new ones." He went on to emphasize his view that rental arrangements will not solve the car-supply problem—because the per diem charge "does not bring into the industry any additional money to finance or repair freight cars."

WHAT'S NEEDED, Mr. Loomis added, are income tax arrangements to shorten depreciation terms on rolling stock, and to permit railroads to accumulate construction reserve funds. And the AAR president then reminded Senator Magnuson that Congress adjourned without acting on proposed legislation to set up such arrangements.

Shippers Along the Coast Line

One of a series spotlighting the companies that work and grow along the Coast Line



U.S. Phosphoric Products
Division of Tennessee Corporation
Tampa, Florida

750,000 Tons of Phosphate Products a Year

Phosphate rock and sulphur! These are the basic raw materials U. S. Phosphoric Products has been processing for over 30 years into much-in-demand chemicals, fertilizers, and pesticides. Last year shipment of these products to the entire nation was in the hundreds of thousands of tons.

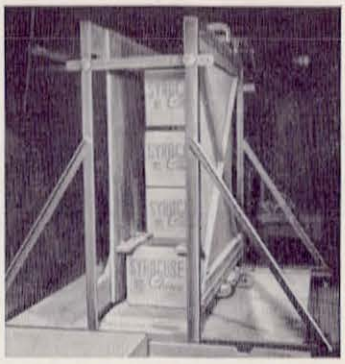
A division of the Tennessee Corporation, U. S. Phosphoric is one of the longest established and best known of Tampa, Florida's thriving industries. At its huge 1500-acre site, the company maintains its own docks to receive barge-loads of sulphur from mines in Texas. A marshalling yard with a 500-car capacity handles both incoming carload lots of phosphate rock from Central Florida and all outgoing shipments of finished products.

Reliable transportation — a steady supply of raw materials plus on-schedule delivery of its products — is an absolute necessity for U. S. Phosphoric. Coordinating and insuring the smooth flow of such heavy bulk shipments is routine with Coast Line. Our traffic men are experts at it, and the more difficult the shipping problem the better they like it. Gives them a chance to show what they can do. Let them show you what Coast Line can do for your company. Large load or small, Coast Line handles them all.

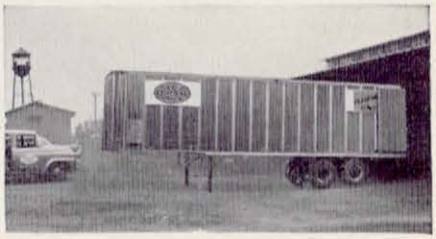
ATLANTIC COAST LINE RAILROAD

"Flexi-Van gives us faster delivery with no breakage"

says W. S. Carter, Director of Transportation, Syracuse China Division, Onondaga Pottery Co.



"We use this carton punishing machine to develop the best package. Even so we had breakage losses before we started using Flexi-Van."



"We get *service* on Flexi-Van. On short notice we can have a trailer spotted just where we want to load it."

"With no need for dunnage or bracing, we can load a shipment quickly and more economically."

"We load Flexi-Van in two-thirds the time required for other road or rail equipment," says Mr. Carter. "We get second morning delivery at the consignee's dock in Chicago – a day faster than over-the-road. And best of all, *no* breakage. I am looking forward to still greater use of Flexi-Van as the service is extended to other points."

New York Central Railroad

Write: R. L. Milbourne, N. Y. Central, 466 Lexington Avenue, New York 17, N. Y.

Your freight is loaded, locked in under your supervision.

Van boards freight train at trackside. Transfer time, 4 minutes.

Shipment rides low, well cushioned aboard high-speed cars.

Beats trucks on long hauls. Two pick-ups or three deliveries.

September Traffic Poll

RR Advertising Good—But Could Be Better

Proposition

As competition for freight traffic between various modes of transportation increases, many railroads are paying more attention to the training, organization and activities of their traffic sales forces. This month's Poll is the fifth in a series which is designed in total to ascertain what shippers think about railroad salesmen and their work, and to find out if and how they think that work might be improved.

Questions

(1) Is railroad freight advertising:

Effective?	**36**
Informative?	**47**
Ineffective?	**13**
Uninformative?	**8**

(2) What subjects do you think railroads should emphasize in their freight advertising?

Special services (e.g., car tracing, car reporting, damage prevention, etc.)	**56**
Schedules	**45**
Equipment	**39**
Rates	**18**
Routes	**16**
Personnel	**9**
Miscellaneous (see text)	**13**

The advertising which railroads use to support their freight sales efforts is informative—but not always fully effective. It could be made more informative —and thus more effective—if it placed more emphasis on subjects of particular interest to industrial traffic managers.

Most popular subject, judging from replies to this month's Poll, would be special services, i.e., car tracing, car reporting, damage prevention, etc. Next in order would be schedules, with equipment—particularly special equipment—a close third. Rates, routes and personnel were ranked fourth, fifth and sixth, respectively.

Other possible subjects for railroad advertising mentioned in one or more Poll replies were: "Any improvement" —3; "case histories of specific problems solved" and "anything railroads do better than their competition"—2 each; and "research," "customer interest," "dependability," LCL service, "clean cars," and "anything not offered by competition"—1 each.

Shipper interest in advertising of whatever special services railroads have to offer was explained by W. L. Haywood, Jr., traffic manager, General Latex & Chemical Corp., Cambridge, Mass., and L. F. VanKleeck, who holds the same position with the Brown Co., Berlin, N. H. "Rates, services, etc.," Mr. Haywood said, "are most always comparable; railroads should emphasize special services, if they have any." "Special services," Mr. VanKleeck agreed, "are becoming more and more necessary. Advertising of them is almost a necessity."

Much the same opinion was expressed by Paul J. Bond, general traffic manager, Pure Oil Co., Chicago: "Industrial traffic personnel are familiar with rate and route information. [Special services, schedules and equipment] are of more interest." Similarly, F. E. Brence, manager of traffic for Flexonics Corp., Maywood, Ill., suggests that items other than special services "are pretty well known by traffic personnel, or can easily be gotten when necessary."

Advertising of schedules also drew strong support. "Carriers," says H. P. Gabriel, GTM, Hershey Chocolate Corp., Hershey, Pa., "should better advertise schedules and routes that produce the best services from a given area. . . . Many shippers have a difficult time determining the most expeditious service between two points. The usual method is by trial and error. If a carrier, or a group, would set up schedules, advise shippers, and hold to those commitments, they would certainly place themselves in a better position to attract traffic."

W. E. Toalson, traffic manager, Pure Gold, Inc., Redlands, Calif., makes much the same point: "Railroads have one, and only one, thing to sell in competition with one another—that is service. Yet there are still some roads from whom it is most difficult to get decent schedule information. They attempt to cloak schedules in a veil of mystery, and make you feel like a special-privilege customer when they do put out certain information. Those are the roads we use no more than absolutely necessary."

Edward Sutt, plant traffic manager, Colgate-Palmolive Co., Louisville, Ky., points out, however, that schedule advertising can be "misleading" if it covers "terminal-to-terminal time and not shipper-to-consignee service." And E. F. Mundy, National Biscuit Co.'s general traffic manager at New York, says schedules alone are worthless. "Performance counts." So, he advises, "stress dependability when it can be guaranteed."

A good example of the desirability of advertising the availability of special types of equipment was cited by G. V. Foley, traffic manager, Electric Steel Foundry Co., Portland, Ore. "By accident," he says, "we recently found that two different transcontinental lines were moving empty container-type gondolas westbound. These are now being loaded by us on this deadhead movement, very successfully. We could have commenced this several years ago if these lines had advised us of this special equipment going to waste."

Most of the men who gave high ranking to the importance of rate or route advertising did so without special comment. A couple of them, however—F. C. Tighe, senior traffic manager, Union Carbide Corp., New York, and F. G. Chapman, traffic manager, Harbor Plywood Corp., Aberdeen, Wash.—think rail advertising should make greater use of route maps. "Readers will remember" routes thus advertised, says Mr. Tighe, "and use them when the opportunity comes." Even very small maps, Mr. Chapman adds, "would give shippers a better idea of where the railroad is located, and the territory and connections served." They could, he suggests, be run in a series showing segments of main line, and branches, and be designed for filing for reference purposes.

E. M. Burk, traffic manager, Wyatt Metal & Boiler Works, Houston, is "particularly impressed" with "advertising designed to familiarize shippers with railroad employees in various agencies. You see their pictures and, in some cases, get an idea of the background of some people you may have been doing business with on the telephone for years."

Like a good many other respondents, Mr. Burk also likes ads "outlining improvements in various services and equipment."

(*Continued on page 40*)

On Special Device Cars . . .

Parts Loss Hurts RRs, Shippers

"Let DF also mean: Don't Forget . . . put all the equipment back!"

It's no accident that this Golden Rule for shippers and receivers appears, paraphrased, seven times in Evans Products' 24-page manual on loading and unloading DF cars.

Railroad men say consignor-consignee carelessness with removable damage-reducing gear is costing the carriers thousands of dollars annually.

Thus, it may be no accident, either, that the Sparton Railway Equipment Division of Sparton Corp., in its more recently developed Tri-Belt car, provides in-car stowage space for unneeded equipment.

Piece by piece, repair and replacement of detachable lading protection devices is nickel-and-dime expense compared to many railroad maintenance costs. Crossmembers, for example, can be repaired for $6 to $8. Replacements run about $17. But a single DF car may contain many loose parts, worth, in total, a lot of dollars. Costs mount quickly if shippers and receivers consistently neglect to replace them.

The Evans company has run checks on the attrition of DF parts—one survey, covering 600 cars over a 2½-year period, showed an average of 1.77 crossmembers lost per car per year. With about 37,000 DF cars now in service on 53 roads, Evans notes, the loss doesn't appear great. Sparton, which has put more than 1,000 Tri-Belt-equipped cars in service during the past year, reports "no important losses to date."

Cost-conscious railroad men, however, are still sweating over new approaches to the problem. Thus far they've found no easy way to assure replacement of the detachable gear.

By and large, the manufacturers of special device cars do their part. Evans, for example, cautions shipper and receiver repeatedly to "be doubly sure to replace ALL loader equipment in the car from which it was taken. At its own expense the railroad has fitted cars with this equipment to provide you, the user, with a damage-free, dunnage-free method of shipping. Please cooperate and check each car before it leaves to be sure all equipment has been returned. Without it, the DF car becomes just another car."

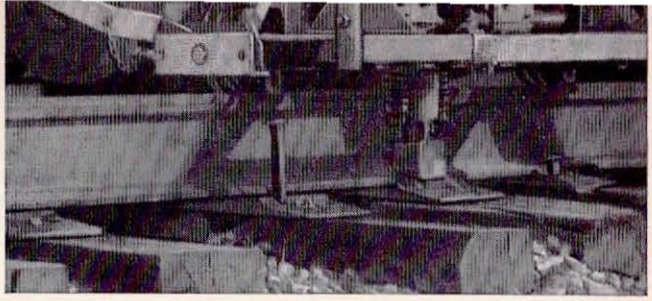
Sparton posts in each end of its Tri-Belt cars printed and illustrated instructions for stowing and securing unneeded crossmembers and deck boards. It also uses its own field representatives to run regular checks on use of cars and handling of equipment.

Manufacturer representatives stress the same caution in talking with the people who actually handle the loading and unloading of device cars. Railroad men and conscientious shippers and receivers who use device cars hit the same point time and again. Thus far their progress has been slow—but continuous hammering away at the issue may still be the best, if not the only, answer to the problem.

As the AAR's Carl A. Naffziger notes, there's no tariff provision covering replacement of device gear—and even if there were such a provision it couldn't be policed adequately.

Mr. Naffziger, director of the AAR's Freight Loss & Damage Prevention Section, views the situation as essentially one of self-preservation for the shipper: If he wants special device cars he should take proper care of the equipment, loose and fixed.

(*Continued on page 17*)



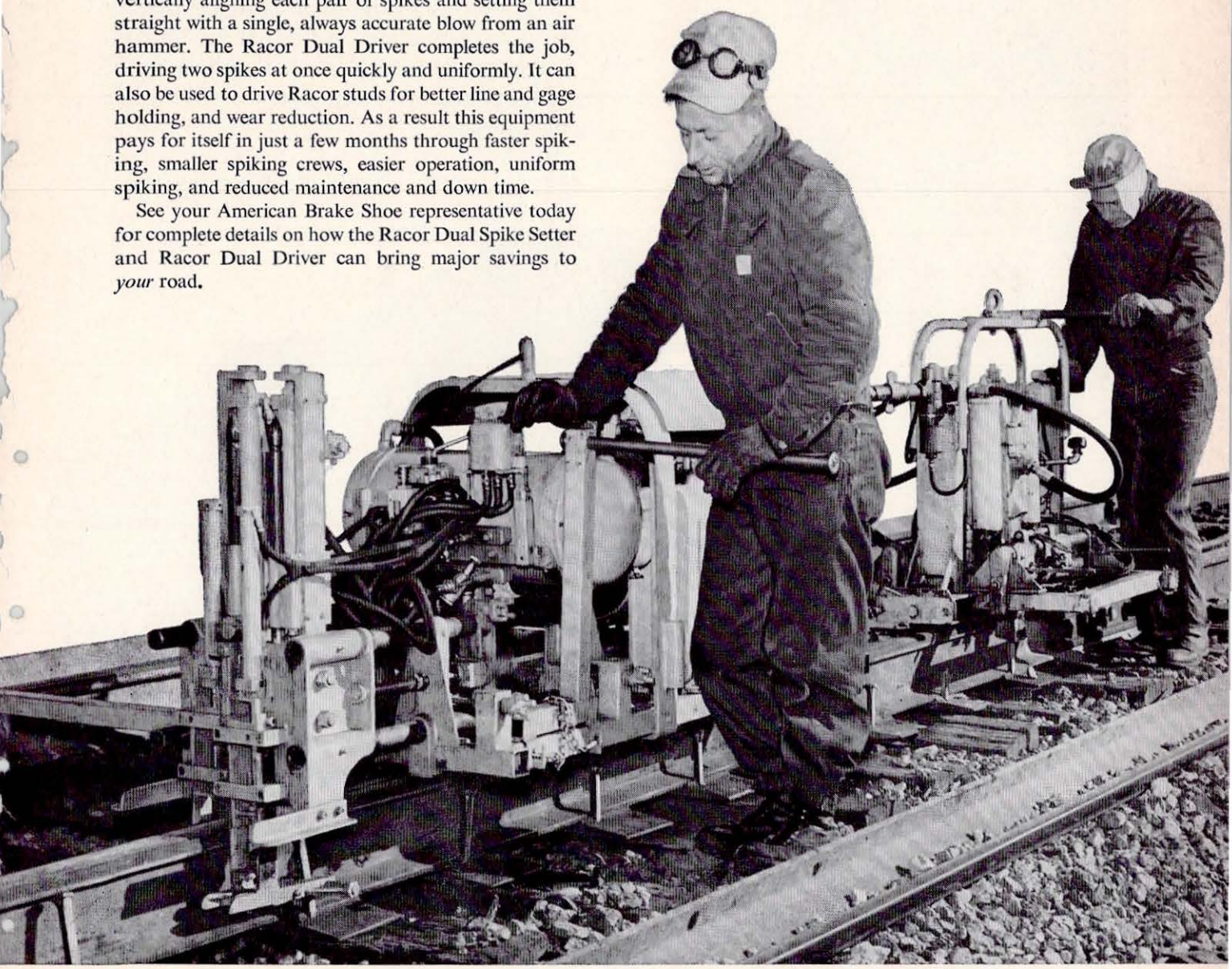
Spikes set up straight and true by the Racor Dual Spike Setter are firmly, quickly driven by this Racor Dual Driver.

This Racor Spiking Team can do the work of a dozen men

RACOR DUAL SPIKE SETTER AND RACOR DUAL DRIVER CUT COSTS, SPEED RAIL LAYING, AND IMPROVE TRACK

Once, as many as twenty-one men were required to set and drive spikes. Now nine can do the job better and faster than ever before with the new Racor Dual Spike Setter and Racor Dual Driver doing the work of twelve men. Just one or two men are required to position spikes ahead of the Racor Dual Spike Setter which moves in, vertically aligning each pair of spikes and setting them straight with a single, always accurate blow from an air hammer. The Racor Dual Driver completes the job, driving two spikes at once quickly and uniformly. It can also be used to drive Racor studs for better line and gage holding, and wear reduction. As a result this equipment pays for itself in just a few months through faster spiking, smaller spiking crews, easier operation, uniform spiking, and reduced maintenance and down time.

See your American Brake Shoe representative today for complete details on how the Racor Dual Spike Setter and Racor Dual Driver can bring major savings to *your* road.



A-2994

AMERICAN Brake Shoe COMPANY

RAILROAD PRODUCTS DIVISION
530 Fifth Avenue, New York 36, N.Y.
In Canada: Dominion Brake Shoe Company, Ltd

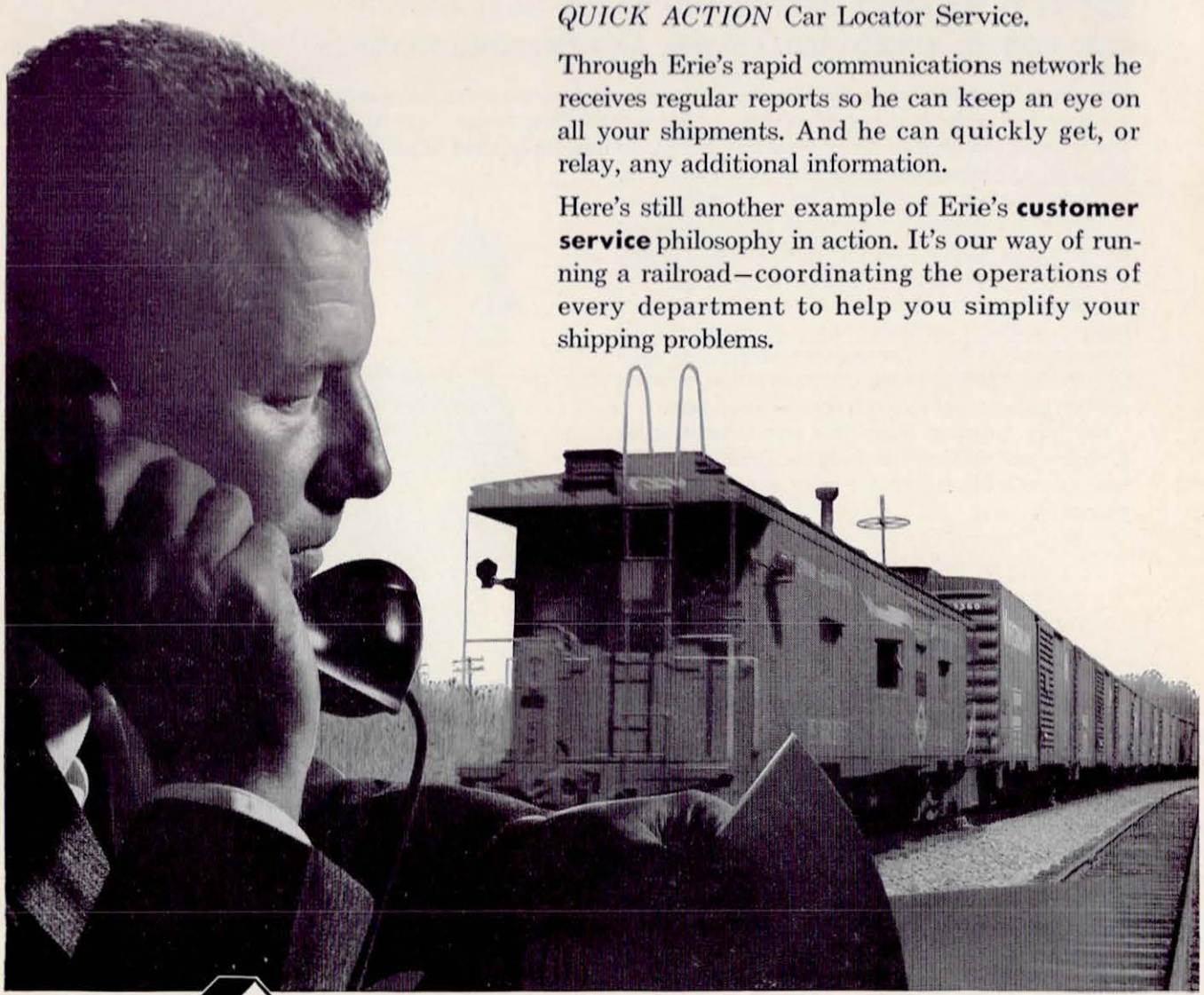
Your Erie customer service man has...

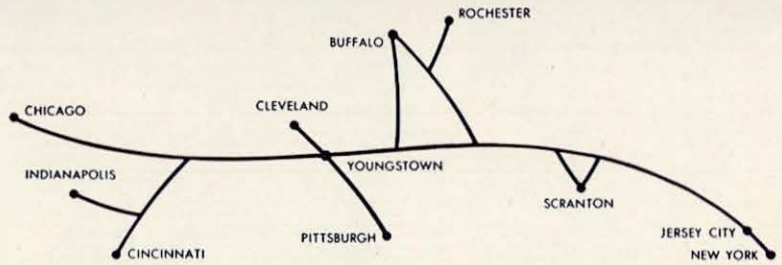
An eye on your shipment all the way!

Your Erie **customer service** man can answer questions about your shipment *fast*. Usually while you hold the phone he can tell you where it is—when it will get there—thanks to Erie's famous *QUICK ACTION* Car Locator Service.

Through Erie's rapid communications network he receives regular reports so he can keep an eye on all your shipments. And he can quickly get, or relay, any additional information.

Here's still another example of Erie's **customer service** philosophy in action. It's our way of running a railroad—coordinating the operations of every department to help you simplify your shipping problems.





ERIE

...symbol of dependable **customer service**

Erie Railroad

Dependable Service For The Heart Of Industrial America

PARTS LOSS HURTS RRs, SHIPPERS *(Continued from page 14)*

Railroad operating men have been working on several approaches to the problem, with varying success:

- The carrier can impress on its field men—agents, demurrage clerks, switch foremen—the necessity for not moving the car until all the device parts are stowed.
- Carrier mechanical departments can be asked to report when special device cars pass over a rip track and parts are found missing. The report, forwarded to agent or trainmaster or superintendent, can serve as a basis for going back to the last receiver to re-check the car's complement of parts.
- Some method might be provided for storing device parts in the car, above the load line—"Make it easier to put the gear up there in the right place than to throw it out the door, and then probably it will be taken care of," one operating man commented. This, as indicated above, is Sparton's answer to the problem—provide stowage space, above the load line, for any unneeded gear, so that it never has to leave the car.
- The parts complement of the car can be cut according to the movement it's making. Many device cars move fairly steadily in a particular trade. As one railroad officer notes: "There's certainly no need to keep 40 crossmembers in the car when, in a typical loading pattern, only 10 or 20 are used. We've pulled crossmembers out and put them in our own storehouses until we got a demand for them."
- In some cases, systematic carrier checking will keep the parts in the cars. One road uses line checkers, who cover all industries every working day. The checkers have been assigned to watch the problem specifically—to talk with the industry loading foreman or shipping clerk to make sure all gear is returned to the car. An officer of the line using this system commented recently: "I believe that, without exception, [it] has worked 100%."

(This type of day-in, day-out checking gets around a common complaint: That the loading crew at Plant A this year may be well trained in replacing DF parts—but turnover in loading dock personnel is high and the education job must be done again and again.)

- Railroad loss and damage prevention forces can be increased. More intensive work in the special device car field could be done—if the carriers had more men to do it. But the added expenditure would have to be justified by reduction in parts losses—or in freight claims.

Device cars with removable parts aren't the only ones which have developed maintenance problems. Compartmentizer cars don't have loose components—but railroad men found consignees failing to lock the gates in position before releasing unloaded cars. Interior damage resulted, until the cars were modified so that free-swinging gates latch automatically on the first car impact.

The return of inflatable rubber dunnage bags has also posed problems for some of the increasing number of shippers who are using them. Generally speaking, however, these bags are owned by the shippers themselves rather than by the railroads, so shippers have greater incentive to watch them closely. In many instances, also, they are used only for captive movements to other company plants or warehouses, which insures complete shipper control of all movements.

All in all, it's a somewhat ironic situation. As one railroader commented: "We go around talking up the clean car campaign and trying to educate the shippers to throw everything out of the car—and now we want to go around and tell them to put these crossmembers back in the car."

Railroad Officers Tell the Story

"We find that, with DF cars in general service, or in assigned service with a specific shipper and miscellaneous receivers, the problem of getting the parts restored to the cars by the consignees is quite serious and is a heavy drain on expenses. . . ."

"At a shippers advisory board meeting not long ago, we found that the railroads in all cases complained about the parts and pieces of damage-free cars. In some cases it was indicated that there were as many as 1,000 pieces of DF gear at different industries. These parts were labeled, stenciled by a dozen railroads or more. . . . Parts of cars are important, very important. But the shipper or receiver in a lot of cases just refuses or ignores the replacement of that material—and it can be an expensive thing. In a lot of industries there is just no attention paid to the return of parts from cars. . . ."

"There are some receivers who will take the crossmembers and everything else and just throw them down on the ground. We even found one with half a warehouse full of them. . . ."

"We serve a large warehouse. . . . One day they called and wanted to know what they should do with all this 'junk' they had piled on the platform. We sent the car foreman over. They had about a carload of the partitions and the dividers, belonging to practically every railroad in the country. . . ."

"About six months ago, the AB&C Railroad called us and said 'We have a lot of your crossmembers over here.' It seems as though one industry they serve had been tossing all these crossmembers and bulkheads out. So the AB&C went down there and got a whole carload of gear. They brought it out and sorted it out and we sent rip track trucks over to pick up our crossmembers. They did the same for the XY&Z. . . ."

"Some shippers who load DF cars regularly seem to build a storehouse of equipment—against the day when they'll get a car that doesn't hold enough parts. We found about 2,600 crossmembers in one place. . . ."

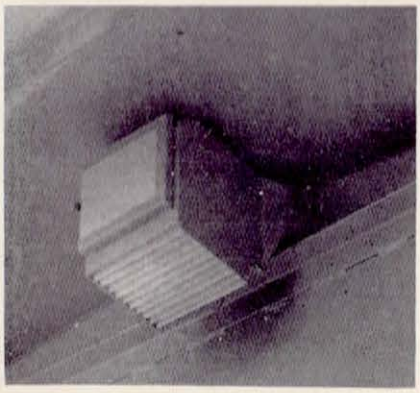
Damage Reducer

Airslide Air Conditioner Keeps Flour Dry

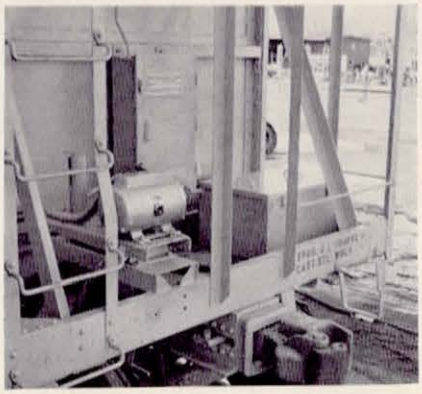
A new air conditioning ventilation system for Airslide bulk hopper cars, tested since last February on the Great Northern, has shown that it can:

- Permit delivery of bulk flour to consignees in the same condition in which it is loaded;
- Eliminate possibility of mold formation on car interiors;
- Prevent moisture condensation and accumulation of caked flour on roof and upper walls during transit;
- Reduce car cleaning time per trip by as much as 85%; and
- Avoid expensive relining. Reductions in cleaning time and relining cost result from the fact that the new ventilating system eliminates the need for scraping car interiors to remove mold or condensation-caked flour.

This New Airslide Air Conditioner . . .

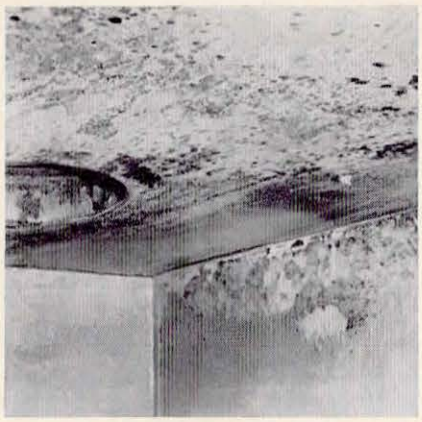


USES VENTILATOR HOODS at both ends of car. One shown here is the intake, with snow baffle on bottom and blank (to replace filter during loading and unloading or when car is not in flour service) in rack on rear.

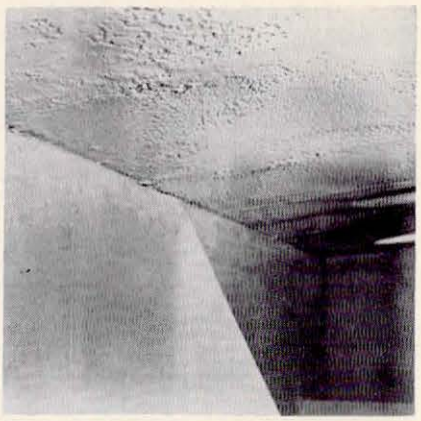


IS POWERED BY this unit—a 12-volt generator (center foreground); a regulator-relay box on end wall of car (center background); and a battery (right) to power fans when car is not moving.

The Air Conditioner Prevents . . .



MOLD DEVELOPMENT on car ceiling, walls and hatches. Mold (dark spots) can eat through car's epoxy resin liner; require scraping and relining; rust metal outer shell.



CAKING OF FLOUR on ceiling and upper walls. Unevenness of caking shows where caked patches have broken loose and fallen into the flour load during transit.

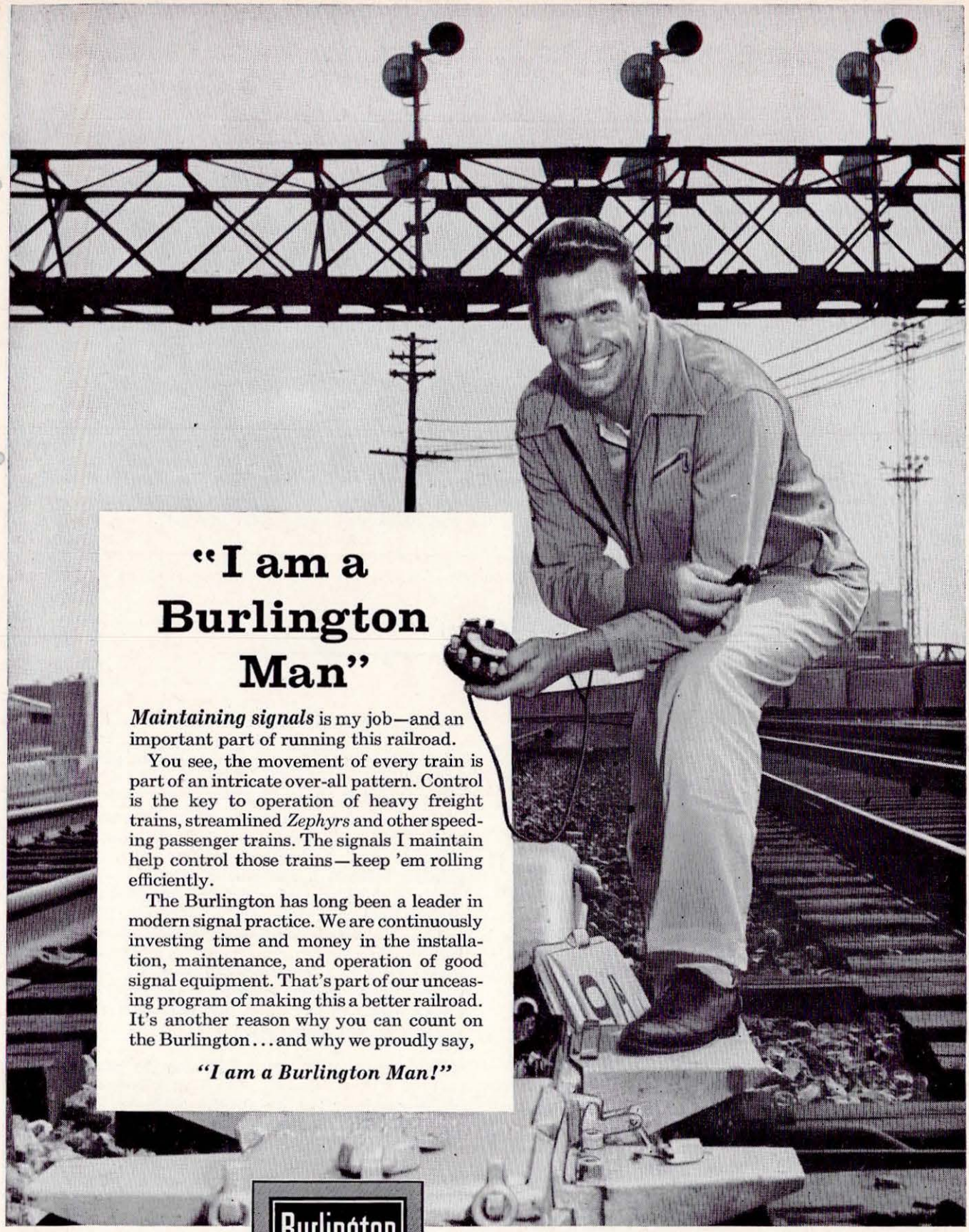
The ventilating system (for which a patent application is pending) was developed by the Russell-Miller Milling Co., of Minneapolis, Minn.; has been approved by the Association of American Railroads; and will be manufactured and leased by Hayes Industries, Box 2018, Commerce Station, Minneapolis 15. Its component parts—generator, batteries, filters, etc.—are made by companies whose products are already recognized as standard equipment on many railroads.

Several railroads and a number of large baking firms have expressed definite interest in its installation in cars used for flour shipments.

Essentially, the new system consists of filtered, baffle-protected intake and exhaust ventilators at opposite ends of the car; intake and exhaust fans with capacity of 500 cfm; a generator to operate the fans when the car is moving; and a battery, charged by the generator, to provide power for the fans when the car is on a siding. The fans are designed to be turned on from the time car hatches are sealed at the loading mill until they are opened at destination; also during the return trip from bakery to mill to keep the empty car thoroughly dry. When a car is first loaded and trimmed, the fans will replace all air on top of the load every 30 sec; after the flour has settled—usually 18 to 20 in.—during transit, they will replace all air every 90 sec.

Importance of the new development lies in the fact that covered hopper cars of the Airslide type have been rapidly and widely adopted by the flour milling and baking industries as the most efficient, most economical and most sanitary means of shipping bulk flour over long distances. Yet the cars, both loaded and empty, are inevitably subjected to wide variations in temperature and humidity during loading and unloading and while in transit. This leads to condensation of moisture in the car, and, in turn, to caking of flour or formation of mold on upper interior car walls and ceilings.

Aside from the possibility of direct damage to the load, the cars themselves have to be frequently scraped—a process which can be expensive and time-consuming and which can damage the epoxy resin car linings.



"I am a Burlington Man"

Maintaining signals is my job—and an important part of running this railroad.

You see, the movement of every train is part of an intricate over-all pattern. Control is the key to operation of heavy freight trains, streamlined *Zephyrs* and other speeding passenger trains. The signals I maintain help control those trains—keep 'em rolling efficiently.

The Burlington has long been a leader in modern signal practice. We are continuously investing time and money in the installation, maintenance, and operation of good signal equipment. That's part of our unceasing program of making this a better railroad. It's another reason why you can count on the Burlington . . . and why we proudly say,

"I am a Burlington Man!"

Burlington Route

Chicago, Burlington & Quincy Railroad
Colorado and Southern Railway
Fort Worth and Denver Railway

BURLINGTON LINES · *Everywhere West*

No Passengers—Faster Freight

"Better mail, express and less-than-carload freight service than Maine and its people have ever known" is the promise of E. Spencer Miller, president of the Maine Central. Mr. Miller revealed plans for this better service in an address before the New England Shippers' Advisory Board last week. But he warned that it would only be possible if MC is allowed to abandon all passenger service in the state.

Both the MC and the Bangor & Aroostook are awaiting the decision of the Maine Public Utilities Commission on their petitions to end all passenger service. The two roads say that this service is costing them more than $2,750,000 a year in losses.

Mr. Miller said elimination of the Maine Central's passenger service deficit would mean lower rail freight rates, more modern cars and equipment, faster movement of rail freight and "a strengthening of the sinews of Maine industry."

He outlined for the first time a plan for "merchandise trains." This would involve "three daily round trips, with all six trains carrying railway post office cars. Two round trips will be between Portland and Bangor with an extension to Vanceboro if arrangements can be made with the Canadian Pacific, and one will be a turn-around job between Portland and Waterville. We will look to the mail pay to cover the cost of operation of these trains, and will build up volume with other forms of freight."

Mr. Miller added that he thinks "there will be no satisfactory competition for this service as far as express and package shipments are concerned. We are offering to the post office people a willingness to carry mail, under contract and via the highway, to each point in our territory which our rail lines do not meet, or to on-line points where . . . we cannot stop the new trains.

"In addition, our regular freights will be held available to handle parcel post and bulk mail. This, quite obviously, means a far better mail service, a far better express service, a far better less-than-carload service . . ."

Mr. Miller also told his audience of industrial shippers the new trains would be available for carload movement.

But, he warned, "there can be no thought to partial retention of passenger service. Any attempt to force this upon us will ruin the plan, will ruin the new jobs for a great many people, and will ruin the proposed mail, express, less-than-carload and better freight service for this state."

Railroading After Hours with Jim Lyne

GOOD SERVICE IS CHEAPEST—I ran into Arthur Genet on the train the other evening and railroaded with him a couple of hours. AG, as most railroaders know, was a prominent traffic vice president—now in the armored trucking business, and a high-powered salesman who has by no means lost his interest in railroading.

He emphasized the importance of dependable service in winning traffic. He said, a number of years ago, he advocated improved service among a group of railroaders and a prominent member of the group agreed with him—but added that "improved service costs money and we haven't got the money."

"Good service is more economical than poor service," AG contended. "Good service gives you more traffic and reduces your unit costs. Poor service drives traffic away and raises your costs." Plausible and worth looking into, I'd say.

GET THEM YOUNG—GN Vice President Clyde Pearson tells me the GN gave employment to 153 college students this past summer—boys whose service it actively recruited. The purpose was three-fold: (1) to enable deserving boys to make some much-needed money to advance their education; (2) to give them a first-hand knowledge of railroad work, with the likelihood that some of them might make it their after-college career; (3) to permit the railroad to evaluate the performance of the group, selecting for active recruiting those who showed most promise.

Many alert companies with recruiting programs are not waiting till the boys graduate, to select their candidates—but I don't know of many railroads that have, in proportion to size, gone into such a project on as large a scale as the GN has.

ONE BIG OP UNION—A columnist named Bill Pinney in the Panama City (Fla.) News suggested a name for the proposed combined union of railroad operating people. His suggestion is "American Federation of Featherbedders."

He passes along some more joking comment in similar vein. I can enjoy humor as much as the next fellow, but where to draw the line between fun and injurious exaggeration becomes a problem. It doesn't take too much joking of this kind to give people a reputation they really don't deserve.

The only remedy for a thing like this, it seems to me, is to abstain entirely from any and all practices which give occasion for such wise-cracks. Just as a fellow who gets the reputation (whether deserved or not) for heavy drinking cannot expect to live down that reputation unless he renounces alcohol completely.

'FEATHERBED' IS ENGLISH—On the general subject of who it was that put "featherbedding" into the English language, R. E. Wedekind, SP general attorney, tells me of a language problem the California railroads had when they campaigned successfully in 1948 to modify that state's "full" crew law (which could require 6 or 7 additional brakemen on freight trains).

The referendum measure put to (and approved by) the voters gave the Public Utilities Commission jurisdiction on the extra brakemen issue, but called upon it not to encourage "featherbed practices." Proponents of the referendum needed assurance that the term was actually incorporated in the English language, and found their proof in the "new word" section of the 1947 edition of a standard dictionary, which gave the term its present-day meaning.

"I travel by train because I enjoy it"

"A lot of people, these days, seem to regard travel as an endurance contest. But why should trips be marathons to see who can drive the farthest . . . fastest . . . or games of 'hurry up and wait' to see whether you'll be able to leave when you've made all your arrangements to go?

"I go L & N because I like to be comfortable. I sleep like a baby at night, enjoy the terrific food L & N's dining car chefs serve up at every meal, and look forward to relaxing with other relaxed people in the club lounge. No matter what the weather's like, I know I'll get away when I planned and I always feel good when I get where I'm going.

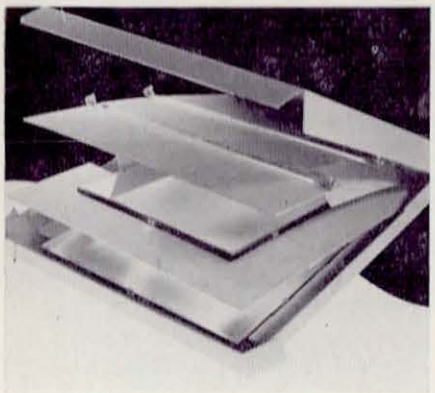
"Since I'm not trying to prove anything to anybody, guess I'll keep right on traveling the way I like best . . . on fast, reliable, relaxing L & N trains."

L&N

The Dixie Line

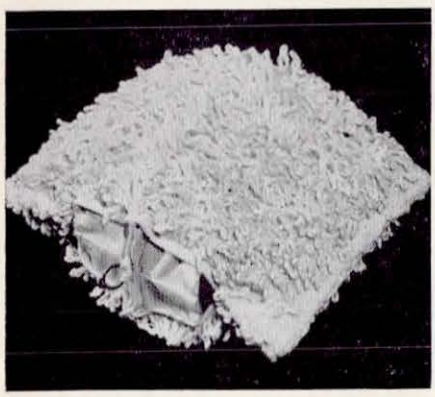
LOUISVILLE & NASHVILLE RAILROAD

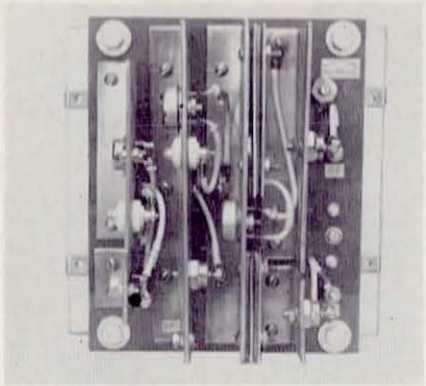
New Products Report



Glass Container

Large mirrors and pictures can now be shipped—"safely and at less cost," the maker says—in a specially-designed corrugated container. This "Shur-Way" box is made of 200-lb test corrugated board; holds up to 80 lbs; and adjusts to any size mirror up to 48 in. by 36 in., from ¼ in. to 2¾ in. thick. It can be reused for three or more trips. *Hinde & Dauch Division, Dept. RA, West Virginia Pulp & Paper Co., Sandusky, Ohio.*



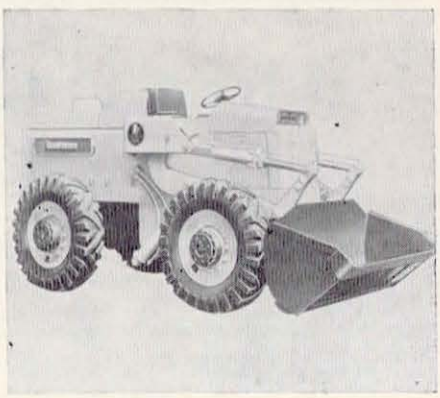


Transistor Voltage Regulator

The F-M new Static Voltage Regulator can be applied to all makes of diesel locomotives to maintain auxiliary generator voltage over the complete speed and load range of the generator. It is said to feature maintenance free performance and a high speed of response over a mechanical regulator. Voltage adjustment of plus or minus three volts from the factory setting of 73 volts is provided. The wiring is designed for 200 deg C. The regulator recovers from a disturbance in microseconds, and voltage recovery is in tenths of a second. Overshoot and undershoot from full load application or removal cannot be detected by a voltmeter. Operation at 150 deg F ambient and under the most strenuous field current conditions is said to show no regulator temperature defects. The unit is mounted in a metal case, 9-in by 9-in by 8-in deep and can be applied in the space normally taken by the moving contractor regulator with four bolts and three wire connections. *Fairbanks-Morse & Co., Dept. RA, 600 S. Michigan Ave., Chicago 5.*

Journal Lubricator

The Oilrite twin-pocket journal lubricator is designed to deliver oil and maintain constant contact with the journal under all operating conditions. The polyurethane cores absorb oil and are equipped with brass springs to assure journal pressure. The outer covering is cotton chenille. Oilrite is AAR approved for test application in interchange service. *Oilrite Journal Lubricator Co., Dept. RA, 1400 E. Tremont St., Hillsboro, Ill.*



Journal Lubricator

The Flo-Pak lubricator features exclusive "life-time" lock-stitch continuous chenille loops. The lock-stitch is said to increase oil wicking rate as compared to ordinary chenille loops. Resilient core material is neoprene foam. Double thickness base cloth is in collar and fillet areas. According to the manufacturer, the lubricator is to be tested by the AAR laboratory. *Miller Lubricator Company, Dept. RA, Winona, Minn.*

Improved Car Loader

A new car loader conveying surface is said to have at least three times the service life of previous materials. It utilizes spring steel belts, with new steel analysis and new spring manufacturing technique, to provide continuous conveying for high-speed loading. With it, the manufacturer claims, one man, unaided, can load at least two box cars per hour. *Power-Curve Conveyor Company, Dept. RA, 2185 South Jason, Denver 23, Colorado.*

Tractor Shovel

Model H-50 is a 4-wheel drive, rubber-tired tractor shovel with 5,000 lbs carrying capacity. It replaces the Model HU "Payloader" in the Hough line. Among features of the new model: A more efficient torque converter, complete power-shift transmission, power-transfer differentials, power steering, pry-out bucket action and safety boom arms. *The Frank G. Hough Company, Dept. RA, 943 Seventh Avenue, Libertyville, Illinois.*

We'll Take the Tough Ones!

A buckin' bronco is a challenge to hard-ridin' cowpokes . . . they're just down-right miserable 'til they've got the critter saddle broke. The traffic and transportation hands on the T&P feel the same way about a buckin' shippin' problem. Nothin' makes 'em happier than slippin' a bridle and saddle on a wild one, and that goes for the Big Trail Boss, too. We've got a whole crew of trail hands that are a-rarin' to lend you a hand in tamin' any traffic or transportation problem that's givin' you an achin' pain.

There's a T&P ranch hand near you who's plum anxious to help you tame the tough ones and to ride herd on your shipments.

Y'all call!!

SHIP T&P

The Texas & Pacific Railway

ABILENE, TEXAS	OR 4-7036	DALLAS, TEXAS	RI 1-6533	LOS ANGELES, CAL.	MA 9-3156	SAINT LOUIS, MO.	CH 1-7060
ALEXANDRIA, LA.	4453	DETROIT, MICH.	TR 2-6665	MEMPHIS, TENN.	JA 6-5717	SAN FRANCISCO, CAL.	SU 1-4612
ATLANTA, GA.	JA 4-1712	EL PASO, TEXAS	KE 3-1436	NEW ORLEANS, LA.	JA 5-6251	SHREVEPORT, LA.	2-3155
BIG SPRING, TEXAS	AM 4-5541	FT. WORTH, TEXAS	ED 6-2363	NEW YORK, NEW YORK	RE 2-0334	TEXARKANA, TEXAS	2-6101
BIRMINGHAM, ALA.	AL 1-4132	HAVANA, CUBA	A-8652	OKLAHOMA CITY, OKLA.	CE 2-7295	TULSA, OKLA.	CH 2-4681
BOSTON, MASS.	LI 2-6195	HOUSTON, TEXAS	CA 4-2320	PHILADELPHIA, PA.	PE 5-2737	WASHINGTON, D. C.	NA 8-1484
CHICAGO, ILL.	RA 6-0313, 6-0506	KANSAS CITY, MO.	VI 2-5129	PHOENIX, ARIZ.	AL 3-0214	WINSTON-SALEM, N. C.	PA 2-6304
CINCINNATI, OHIO	MA 1-1142	LITTLE ROCK, ARK.	FR 2-1285	PITTSBURGH, PA.	AT 1-1505		

SOMETHING **NEW** IN RAILROADING..

"CREATIVE CREWS

How they are making the Milwaukee Road **America's resourceful railroad**

Every railroad has train crews, yard crews, track crews.

But the Milwaukee Road has something new in railroading—"*Creative Crews.*" They're *idea*-men, and they work in *all* departments of this railroad. Theirs is a dynamic *creative* approach to problems that breaks with traditions and pioneers new ideas.

The "Creative Crew" approach has sparked such innovations as the purchase of 1000 new freight cars with ingenious new expanding doors which allow speedier, easier loading and unloading of lumber and other bulky items. The same creative thinking brought Flexi-Van Service, the improved door-to-door, rail-highway service, first, to shippers in the Midwest and Northwest on the Milwaukee Road.

of the Milwaukee Road

Or take an individual shipper's problem. Knocked-down greenhouses had to be shipped from Chicago to California. A ticklish job. A different type anchor plate nail to hold an end-load of steel pipe trusses was one of the creative contributions that went into that job. Little things? Yes, but some of them save thousands of dollars for shippers. Others, like complete electronic yards, have pioneered a whole new concept of keeping freight moving and speeding up deliveries. Still others, now under development, will pay off in the future.

Ingenuity, and a break-through from the pattern of "it can't be done" thinking. That's the spirit of the "Creative Crews." It's making the Milwaukee Road America's *resourceful* railroad.

Route of the Super Dome Hiawathas and "Cities" Fleet

Harriman Award Winners

GOLD MEDALS went to the Union Pacific, St. Louis Southwestern and New York, Susquehanna & Western. Left to right: President H. J. McKenzie, SLSW; President Cyril Ainsworth, American Museum of Safety; President R. E. Sease, NYS&W; Executive Vice President E. Hicks, UP.

SWITCHING AND TERMINAL ROADS winning Certificates of Commendation were the Alton & Southern and Houston Belt & Terminal. Left to right: Mr. Ainsworth; A&S President R. K. Heineman; HB&T President J. T. Alexander; J. G. Lyne, chairman of the awards committee.

CERTIFICATES OF COMMENDATION were also accepted by (left to right) R. J. Stone, Frisco vice president—operations; F. A. Fitzpatrick, vice president, Elgin, Joliet & Eastern; C. A. Pearson, Great Northern vice president—personnel; E. J. Haley, general superintendent, Atlanta & West Point; R. H. Morrison, vice president and chief engineer, Lake Superior & Ishpeming; R. C. Lauten, assistant vice-president, Gulf, Mobile & Ohio; J. N. Broetzman, Seaboard Air Line general manager; President F. W. Okie, Bessemer & Lake Erie; Nickel Plate President F. S. Hales.

Letters from Readers

'Editors Afield'

Swissvale, Pa.

To the Editor:

Every now and then you introduce something in Railway Age without much fanfare but which in our opinion deserves a comment. I am referring specifically to the apparently new column entitled "Editors Afield" appearing on page 44 of your Sept. 7 issue.

Several of us here at Swissvale think the idea is a very good one and hope to see more of such articles in the near future.

J. W. Hansen, Manager
Sales Promotion and Advertising
Union Switch & Signal

Off-Line Solicitation

Seattle, Wash.

To the Editor:

In the Aug. 31 issue of your magazine under August Traffic Poll you quoted an opinion by C. W. Jaenicke, traffic manager of the Chicago Heights Manufacturers Association, advancing what you call an interesting idea that "railroads might get together to eliminate off-line traffic solicitation."

It is my pleasure to be an off-line representative of one of the smaller (though Class I) railroads and for your and Mr. Jaenicke's information it is my opinion that our railroad would get very little business outside of its own territory were it not for its off-line solicitation. When calling on a new shipper he usually asks "what is it, where is it and what can you do for me?" Our railroad is a service line and, after locating it for him and giving him the necessary information, he is usually interested in the service obtainable. This, I am sure, he would never learn from any on-line representatives of any of our connections.

The off-line solicitor, in my opinion, is a most valuable asset to any railroad and his elimination would be disastrous to the railroad economy as we know it today.

C. J. Buckham

Good Summary

St. Louis, Mo.

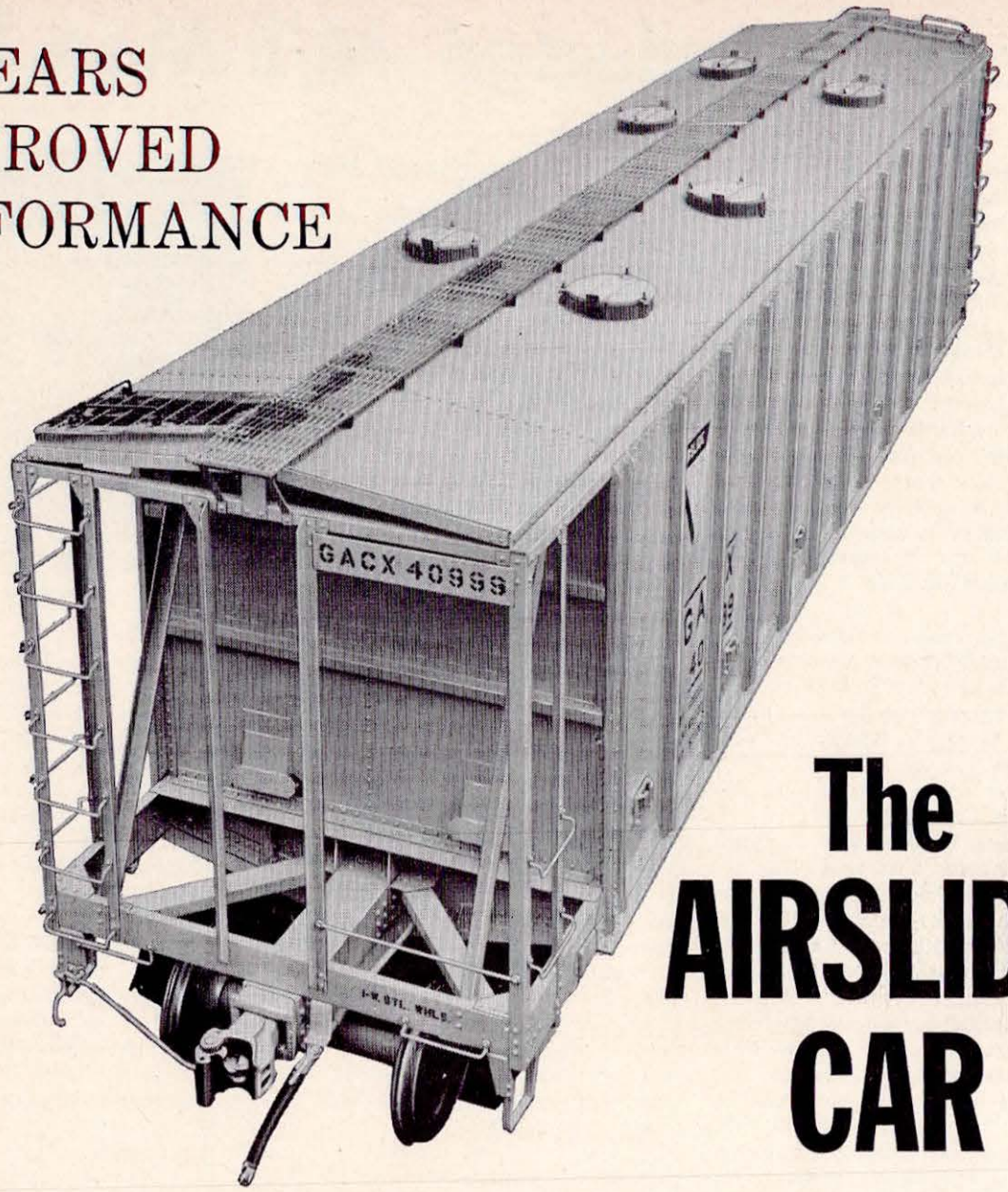
To the Editor:

The editorial on "The Action Page" of the Aug. 10, 1959, issue of Railway Age is perhaps the best one-page summary we have seen of the position the railroads find themselves in.

I congratulate you on the splendid way this situation was set forth in this article in so little space. It boils down beautifully.

Herman H. Pevler
President
Wabash

6 YEARS OF PROVED PERFORMANCE



The AIRSLIDE® CAR

Every year, more and more shippers are going to Airslide Cars for economical bulk shipment. Here's why:

1. No bills for bags, drums or containers
2. Easier, safer loading and unloading
3. No packing, racking or stacking
4. Far more clearance for unloading

For further information on bulk shipping in Airslide Cars, call or write. You'll find, *it pays to plan with General American.*

Airslide and Dry-Flo Car Division

GENERAL AMERICAN TRANSPORTATION CORPORATION

135 South LaSalle Street • Chicago 3, Illinois

In Canada: Canadian General Transit Co., Ltd., Montreal

AIRSLIDE GENERAL AMERICAN TRADE MARK

Share Knowledge, M/E Men Told

► **The Story at a Glance: Objective and revolutionary thinking in design and operation of railroad equipment and services is necessary to solve major portions of today's railroad problems, Atlantic Coast Line President W. T. Rice told last week's Coordinated Mechanical Associations meeting. During the technical sessions, mechanical officers considered methods for more economical locomotive operation, studied problems accompanying the introduction of new types of freight cars, and discussed methods for handling and controlling the high speed freight trains which are becoming the accepted standard for today's operations.**

"We cannot expect the developments of our predecessors to continue solving our problems of today. Each of us must find new ways of doing the job, and be willing to share our knowledge with our colleagues in the industry, such as you are now doing in your joint sessions here in Chicago."

With these words, ACL President Rice sounded the keynote for the annual meeting of the Coordinated Mechanical Associations—comprised of the Air Brake Association, the Car Department Officers' Association, the Locomotive Maintenance Officers' Association and the Railway Fuel & Operating Officers Association. The sessions were held at Chicago's Hotel Sherman.

Problems which must be solved by railroaders were summarized by Mr. Rice as the development of a transportation plant physically capable of rendering service required by the shipper and receiver of freight today, and the establishment of a better public relations program throughout the industry to make more friends for the railroads.

"Gone is the age when the American railroad man could exist in a vacuum insofar as the general public is concerned and expect business to continue to come to the rails," Mr. Rice said.

"During the past few years we have seen many changes in procedures employed by our mechanical departments in building and maintaining railroad rolling stock. We still have not solved the hot box situation. Nothing is of greater importance to the continued advancement of our train operation than solution of the devastating hot box, with resulting train delays and derailments. You have a terrific challenge, both as manufacturers of railroad equipment and as mechanical experts, in continuing an aggressive search for the answer to this oldest of railroad problems.

"The old type of car that so well filled the need in years gone by is rapidly losing its place today with the advent of mechanization of loading and unloading, roller bearings to eliminate the hot box threat, DF equipment to insure safe delivery and greater tonnage carrying capacity that will enable the carrier to receive more revenue per train mile for movement of each individual piece of equipment . . . We have recently heard of the use of aluminum in the construction of rail equipment. This can be seen as another step in the constant search for better ways of meeting transportation requirements."

New attitudes among railroad employees are essential, O. L. Zimmerman, Illinois Central vice president—operations, told the RF&OOA meeting. "You interpret the policies, philosophy, objectives and operations of the companies you represent. We are coming into a period that will be a time of decision for the railroads . . . We are determined to wipe out featherbedding. If we do not, we might as well give up and let the railroads become government property, as they are almost everywhere else. This is our fight to make the railroads of the future stronger—railroads that make good profits; railroads that have money to invest in new and better tools; railroads that can hire more employees because they are doing good business."

Car Developments

New car designs and new car components are changing the rolling stock picture rapidly. The CDOA Committee on Mechanical Refrigerator cars reported that there are now 5,000 mechanical cars in service or on order. It was urged that inspection and servicing points for these cars be expanded so this larger fleet can be utilized effectively. A standardized nomenclature for mechanical cars and their components was proposed for AAR action. This would simplify the transmission of information on these cars between railroads and with car owners.

The CDOA Committee on Design urged that car officers keep thoroughly informed on component developments. "Better car doors and arrangements have been and still are being developed," the Committee reported. "Lading strap-anchoring devices have been improved, as have freight car truck designs and ride control features. Protective coatings are increasing in numbers and durability. Freight car end-strengthening applications are showing definite progress, and manufacturers have developed the answer to the broken body bolsters and sills . . . We cannot expect research and development, if we fail to interest ourselves in new and economically beneficial developments."

ACL PRESIDENT W. T. RICE

H. H. Clark, Erie superintendent of transportation, told CDOA officers that it's time to "get on with our rule making" in piggyback interchange. He said that trailers are rolling stock, and that they and their cars require formal interchange agreements. Three areas must be covered by these agreements:

- Car service.
- Per diem.
- Mechanical interchange.

He said the Operating-Transportation division of the AAR is currently working on the per diem agreement, and that the AAR Mechanical Division is studying interchange rules.

Problems now confronting railroads in piggybacking, as outlined by Mr. Clark, have to do with settlements for damage to trailers, the securing of lading in trailers, and the securing of trailers on cars. Trailer loading problems are unique to rail haul because over-the-highway movements are not subject to the longitudinal shocks developed in train operation.

Mr. Clark said that a fully-loaded trailer on a flat car with a 42-in. deck almost inevitably has a center of gravity higher than the 84-in. permitted in unrestricted interchange by present rules. This should be resolved. Railroad-owned trailers should carry standard markings, even though it may be impossible to get commercial truckers to stencil their trailers with standard ar-

rangements. While equipment standardization should not come too rapidly in this new field, Mr. Clark said, it is time to minimize the number of tire and wheel sizes, brake systems and other mechanical and electrical components. He said that containers are not attractive to the trucking industry because of their adverse effects on payload.

J. H. Long, chief mechanical officer of Trailer Train Co., said the growth of containerization in the marine field has led his organization to study container problems. So far, TTX has no container operations and no Clejan or Flexi-Van equipment only because no owner road has requested these types of equipment. He said the primary TTX problem now is an inadequate car supply that is being further complicated as delivery of current orders for 1,100 additional cars is being slowed by the steel strike.

Mr. Long pointed out that 45-ft trailers are now legal in some states. He said his company has progressed through 75-ft cars capable of handling two 35-ft trailers to 85-ft cars for moving two 40-ft trailers. If trailer lengths were to increase to 45-ft generally, Mr. Long said, there would be difficulty in designing a single car capable of handling two of these large units.

Piggyback Loading Problems

L. E. Schuette, the Erie's assistant superintendent—car department, said that primary problems in current piggyback operations are those of assuring safety of movement and preventing damage to trailer and contents while in transit. He pointed out that the driver alone frequently sees how a closed van is loaded, but that the carrier is solely responsible for subsequent movement when the trailer goes on a flat car. He said that because of original construction or deterioration in service, many trailers offered to railroads are not sufficiently strong for piggyback operation.

During discussion it developed that some railroads open closed vans upon delivery to loading ramps in order to inspect the way the trailer has been loaded. H. L. Hewing, superintendent of interchange, Chicago Car Interchange Bureau, said that he would do this to insure safe movement.

W.M. Keller, AAR vice president—research, reported that his organization is developing a new solid bearing design which will minimize end wear and will have better radial loading through a new back arrangement. Despite criticism of the current journal lubricator progrem, Mr. Keller said that the railroads "cannot live with the waste-pack box."

Let's Modernize Transportation

► **The Story at a Glance: It's up to transportation customers to "demand" better, cheaper and more modern transportation. Engineering and technology are ready to supply it. Disagreements between carriers, unions and regulators are preventing it. Without it, "we shall find increasing difficulty in competing with our friends abroad. Our military establishment will not have the smoothly organized and efficiently functioning system it needs."**

That was the gist of a characteristically blunt address to the Associated Traffic Clubs of America, at Baltimore, Sept. 21, by Maj. Gen. E. C. R. Lasher, president of North American Car Corp., and former head of government military transportation.

"You will profit, and America will gain if you exert your selfish interest as customers to demand better and cheaper transportation," the Associated Traffic Clubs heard last week from the man who helped move supplies to the Normandy beachheads and supplied an army in Korea "with one rickety railroad and two dusty roads."

Unless such a demand is exerted—and met—the United States could suffer both economically and militarily, General Lasher told the ATC's 36th annual convention luncheon. It's being delayed only by outmoded law and the "selfish interests" of carriers and unions—which "pale in the face of customer demands."

"A hog born and raised thousands of miles away can be canned into a ham that sells at a lower price in Chicago than one grown in the hog belt of America and packed a few doors from the supermarket," General Lasher told the traffic clubbers. "Foreign steel can outprice American steel produced on the very edge of the very dock where this foreign steel is unloaded. Need we even mention foreign automobiles?

"Our friends abroad are not only matching our technology; they also are underselling us in the American market place . . . despite the great transportation costs involved. . . . So the United States no longer can relax in the knowledge that she is the undisputed industrial leader of the world. She perhaps still is, but her crown is beginning to take a precarious tilt."

"What," the general asked, "is to be done? Specifically, what can traffic men do to aid in the maintenance and improvement of our position?"

His answer: "A great deal."

His explanation: "When a customer insists on better products or better service he usually gets what he wants. You have a selfish interest in getting better, more efficient, more economical transportation of your goods. Bring this selfish interest to action!

"The way has been pointed out. Call it integration, call it coordination, but let's not get bogged down in semantics. . . . What we really need now is some agreement—agreement among carriers—agreement of unions with carriers—agreement of regulatory bodies with all concerned.

"The technology is here. The engineering is prepared, and can be pushed in any direction necessary. But what is happening? Carriers continue to argue amongst themselves over who will do what, over what will be standard, over what rates will be. Unions . . . cringe at the very technology that would upgrade their members' jobs and insure continued employment in the automated future that most certainly will come. Regulatory bodies are mired in antiquated procedural red tape; this alone may take years to untangle. . . . As we move from the popular piggyback operation to the even more sophisticated container operation, in which water transportation as well as rail, highway and perhaps air can participate, these disagreements could well multiply. . . .

"Unless we begin moving soon in the direction of more efficient, more economical transportation, . . . the cost of moving our goods will continue to multiply. Advances made by industrial technology will be nullified by retarded transportation. . . . The lifeline of America's economy and of America's defense will slowly atrophy."

"That," he concluded, "is the problem. You can contribute mightily to solving it, by investing your selfish interest in a better future for America. As traffic managers, you can demand—pound the table for— more efficient, less expensive, more modern transportation. Not next month! Not next year! Now!

"The barriers that legally separate railroads, trucks, airlines and ships and barges will never be smashed until the customer demands it. Selfish interests [of carriers and unions] pale in the face of the customer's demands. You are the customers. Demand cheaper and better transportation. Demand it now. Exert your selfish interest. You will profit. America will gain."

General Lasher also devoted part of his talk to one of his favorite subjects: containerization.

"Long, careful and detailed study convinced the military establishment years ago that containerization will be the only answer to swift and efficient delivery of the supplies it needs in times of distress."

HOW GRS SIGNA

5 D&H EXAMPLES TOTAL $362,43

SIGNIFICANT savings—right from the start—have justified the D&H's investments in centralized traffic control. Their very first use of cTc, 12.6 miles put in service in 1930, eliminated the expenses of four open offices.

Since then, the D&H have continuously followed a well organized plan of extending cTc and other signal improvements. Today, they are well within sight of their ultimate goal, cTc on the entire railroad.

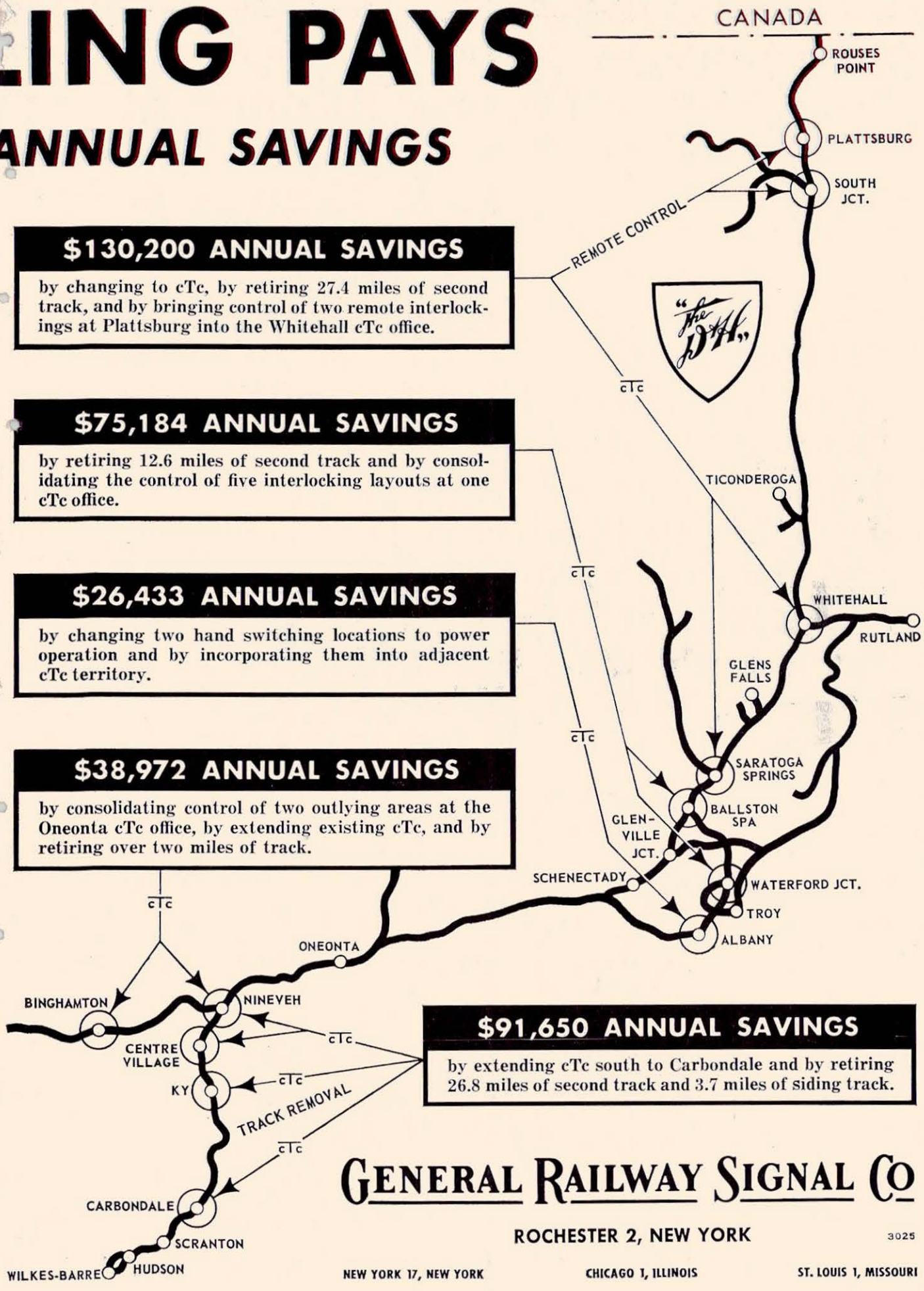
Here are some examples, chosen from many, of how this policy is paying off on the D&H.

You can achieve similar economies with cTc on your railroad—fewer operators, fewer towers, reduction in trackage, and a marked increase in the overall efficiency of your train operations.

Skillfully planned, cTc on the D&H not only eliminated many scattered control points, but also saved by retiring many miles of second track—unneeded with cTc.

LING PAYS

ANNUAL SAVINGS



$130,200 ANNUAL SAVINGS

by changing to cTc, by retiring 27.4 miles of second track, and by bringing control of two remote interlockings at Plattsburg into the Whitehall cTc office.

$75,184 ANNUAL SAVINGS

by retiring 12.6 miles of second track and by consolidating the control of five interlocking layouts at one cTc office.

$26,433 ANNUAL SAVINGS

by changing two hand switching locations to power operation and by incorporating them into adjacent cTc territory.

$38,972 ANNUAL SAVINGS

by consolidating control of two outlying areas at the Oneonta cTc office, by extending existing cTc, and by retiring over two miles of track.

$91,650 ANNUAL SAVINGS

by extending cTc south to Carbondale and by retiring 26.8 miles of second track and 3.7 miles of siding track.

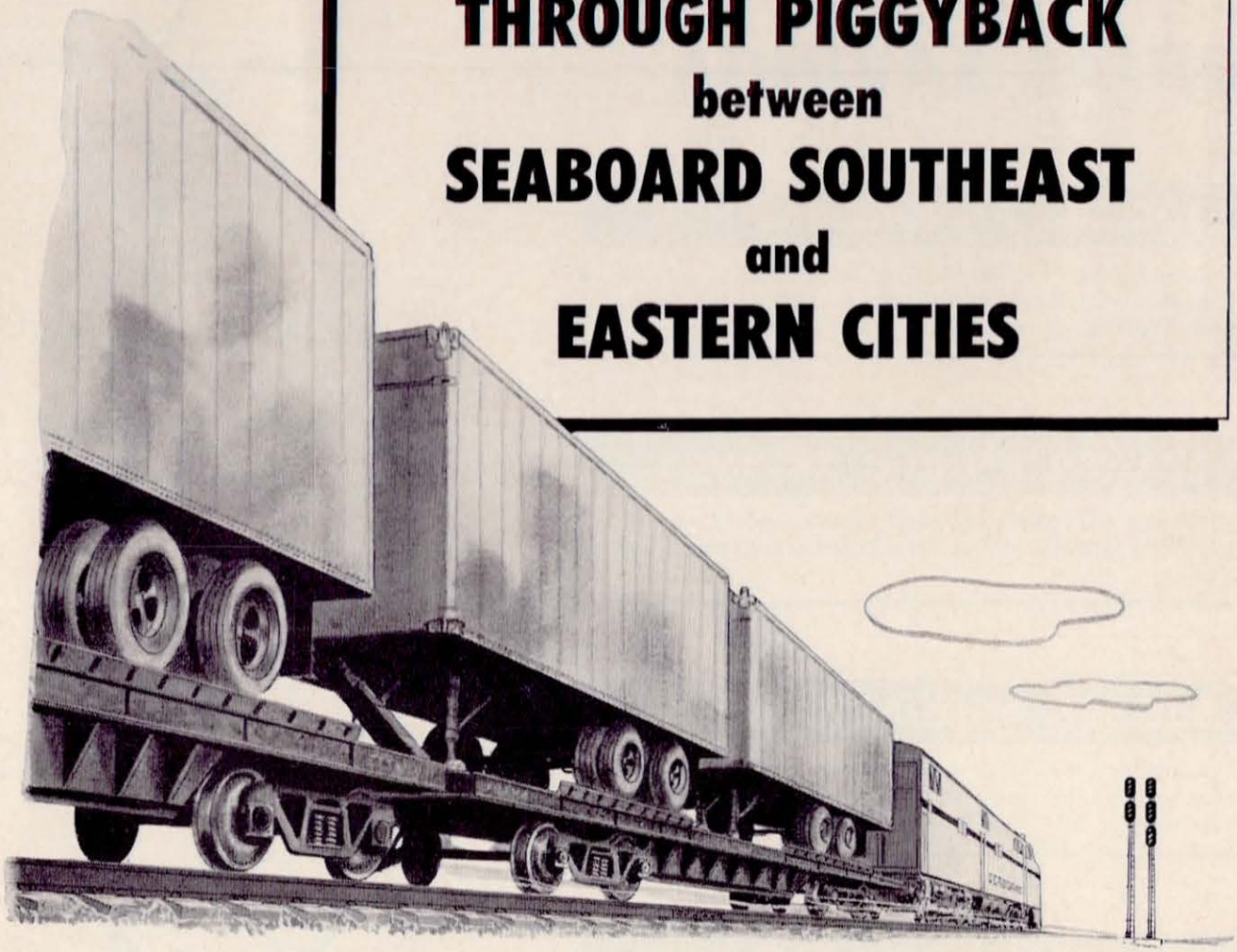
GENERAL RAILWAY SIGNAL CO

ROCHESTER 2, NEW YORK 3025

NEW YORK 17, NEW YORK CHICAGO 1, ILLINOIS ST. LOUIS 1, MISSOURI

announcing...

THROUGH PIGGYBACK
between
SEABOARD SOUTHEAST
and
EASTERN CITIES

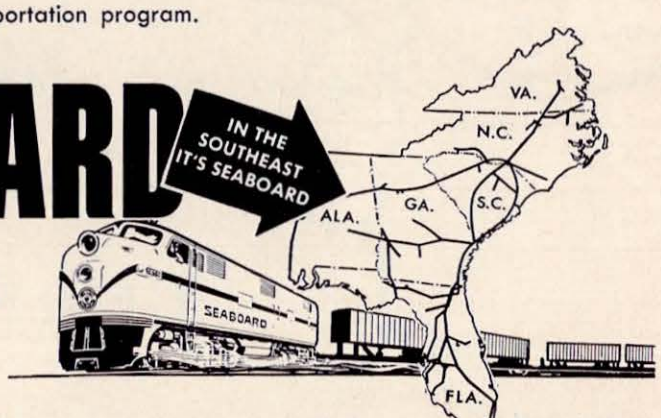


Beginning November 1, Seaboard will bring to shippers and receivers in the Southeast *through* trailer-on-flatcar service to Baltimore, Philadelphia and New York.

Initially, this new service will be provided in Atlanta, Birmingham, Charlotte, Savannah, Jacksonville, Orlando, Tampa and Miami. Plans call for adding other Seaboard cities as soon as suitable arrangements can be made.

Your nearest Seaboard representative will be glad to give you complete information and keep you posted on changes. Let him tell you now how this new, up-to-the-minute service can benefit your transportation program.

SEABOARD
AIR LINE
RAILROAD



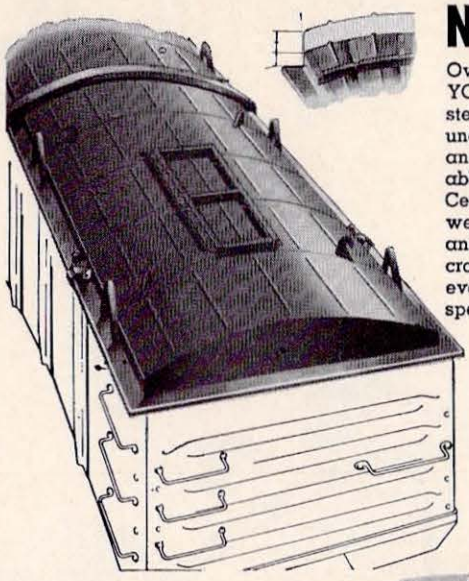
THE ROUTE OF COURTEOUS SERVICE

NEW DAMAGE CONTROL DEVICES by

for Railroads and Shippers

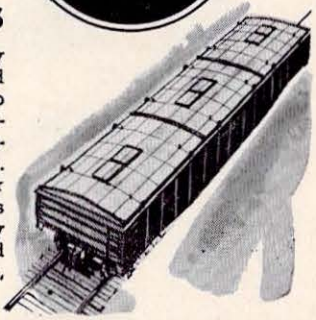
- LOWER SHIPPING COSTS
- CUT DAMAGED SHIPMENTS
- SAVE MAN-HOURS

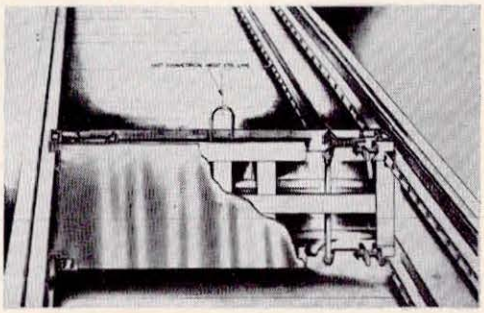
YOCAR



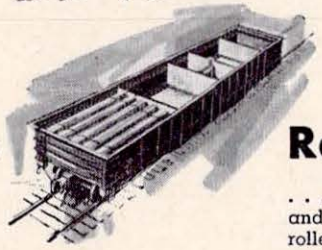
NEW Gondola Roofs

Over-all product costs are **important**—that's why YOCAR roofs are a must for your road. Beaded steel welded over YOCAR's **exclusive** web underconstruction insures warp-free performance; extra months of revenue service. Adjustable roof heights meet A.I.S.I. 48" standards. Center section over-laps end sections; greater weather protection for steel bars, sheets, plates and tubing. Roofs are quickly removed by cranes using "C" hooks, slings, chains and even sheet lifters. Manway doors, catwalks, special heights optional.

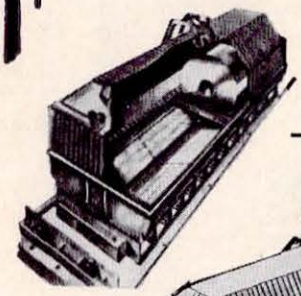




NEW . . RoLLoK Movable Bulkheads

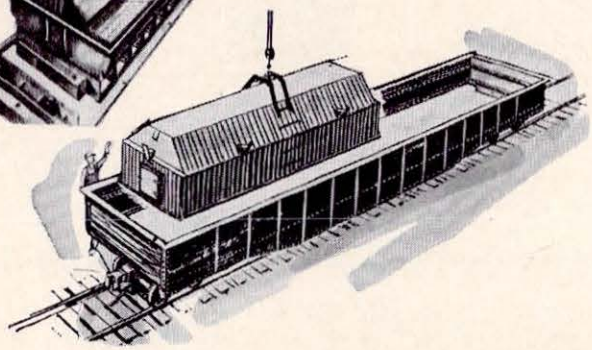


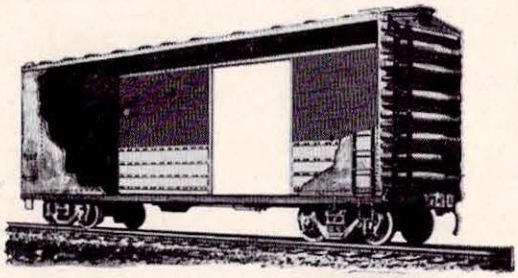
. . . cut installation time in half with new "Zee"-section tracks at top and bottom of car walls; bulkhead positions easily on case-hardened rollers; over-sized locking pins allow for car wall distortion . . . swivel crank operates locking pins quickly and safely. Meets A.I.S.I. standards . . . steel or wood facings available . . . bulkheads are in car sets to meet any requirement.



NEW Gondola Hoods

For your coil shipping needs . . . YOCAR's Hi-Side Hoods to fit all existing skid cars or YOCAR's new Shock-Spring Coil Skid and Low Walled Hood. Features: tighter fits; handles easier, even in low height-clearances; deeper coil well for positive cradling. New cross-member retainer bar locks coils securely for maximum protection.





NEW ECONO-GUARD

. . . low-cost steel anchor-wall liners add years to car wall life . . . provides greater damage protection to shipments with over 200 "Safe-Cargo" anchoring pins. Ask about SAFE-CARGO anchor belt rails for PIGGY-BACK trailers.

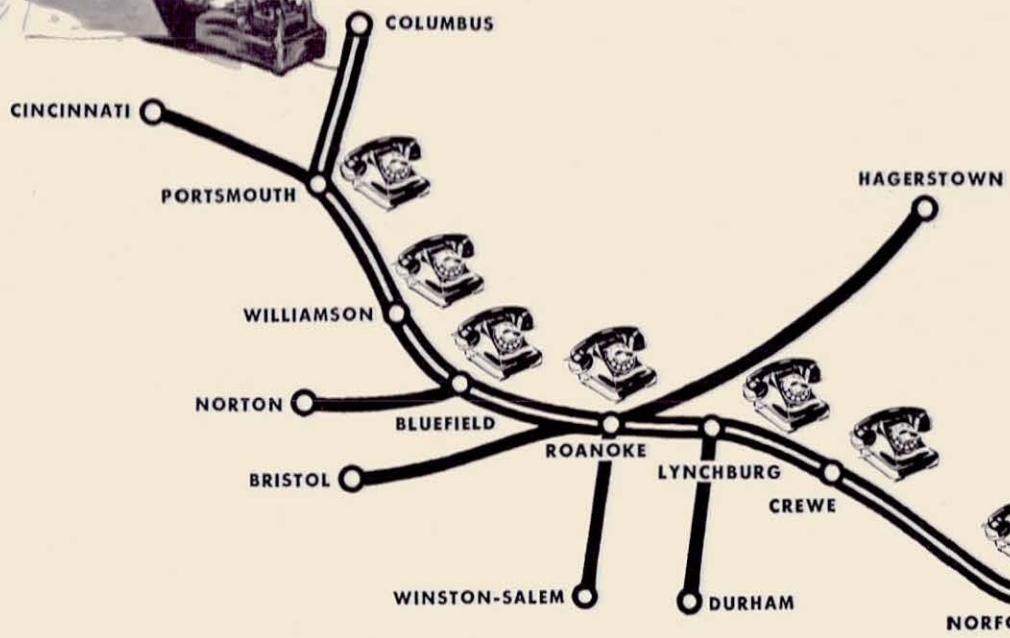
SEND FOR NEW CATALOG TODAY!

YOCAR

YOUNGSTOWN STEEL CAR CORP., NILES, OHIO

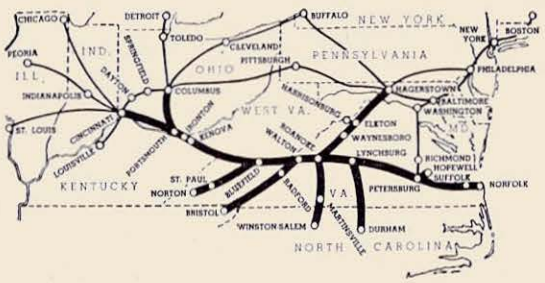
A Big Step Forward In Communications

to speed your freight ...



- New N&W telephone system permits direct dialing between all major points on the line.
- Most complete direct long-distance dialing telephone system of any railroad in the nation . . . just put in operation by Norfolk and Western.
- Culmination of 11 years of planning and 10 years of installation and expansion.
- All equipment owned or leased by the N&W.
- This new system of communications facilitates routing, tracing and sharply expediting your shipments.

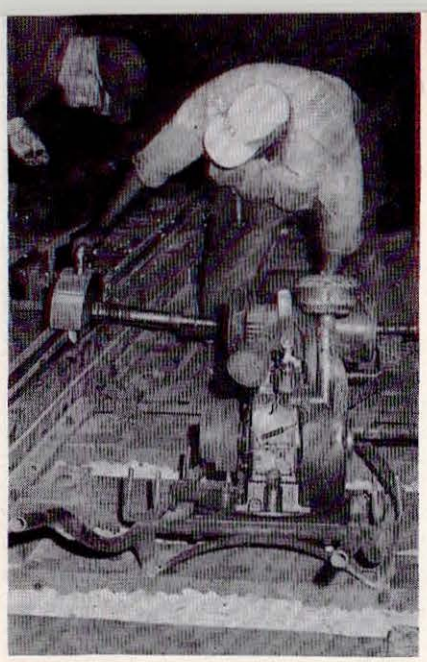
This is modern railroad communications. This is a part of today's Norfolk and Western . . . on the go!



Learn more about N&W's constantly improved service. Get in touch with our freight traffic Sales and Service men in 39 key cities of the U. S.

Norfolk and Western
RAILWAY
PRECISION TRANSPORTATION

PRR Clears Baltimore Piggyback Bottleneck



GRINDING switch point, employees put final touches on one end of 928-ft gauntlet track. Rails on this track are 17 inches closer to center of tunnel to take advantage of maximum height at this point, give better lateral clearance.

A whole new territory is being opened to through piggyback service. TOFC service between the Southeast and many points in the East and New England has been restricted, up to now, because of clearances in Pennsylvania's three tunnels at Baltimore and the Virgina Ave. tunnel in Washington.

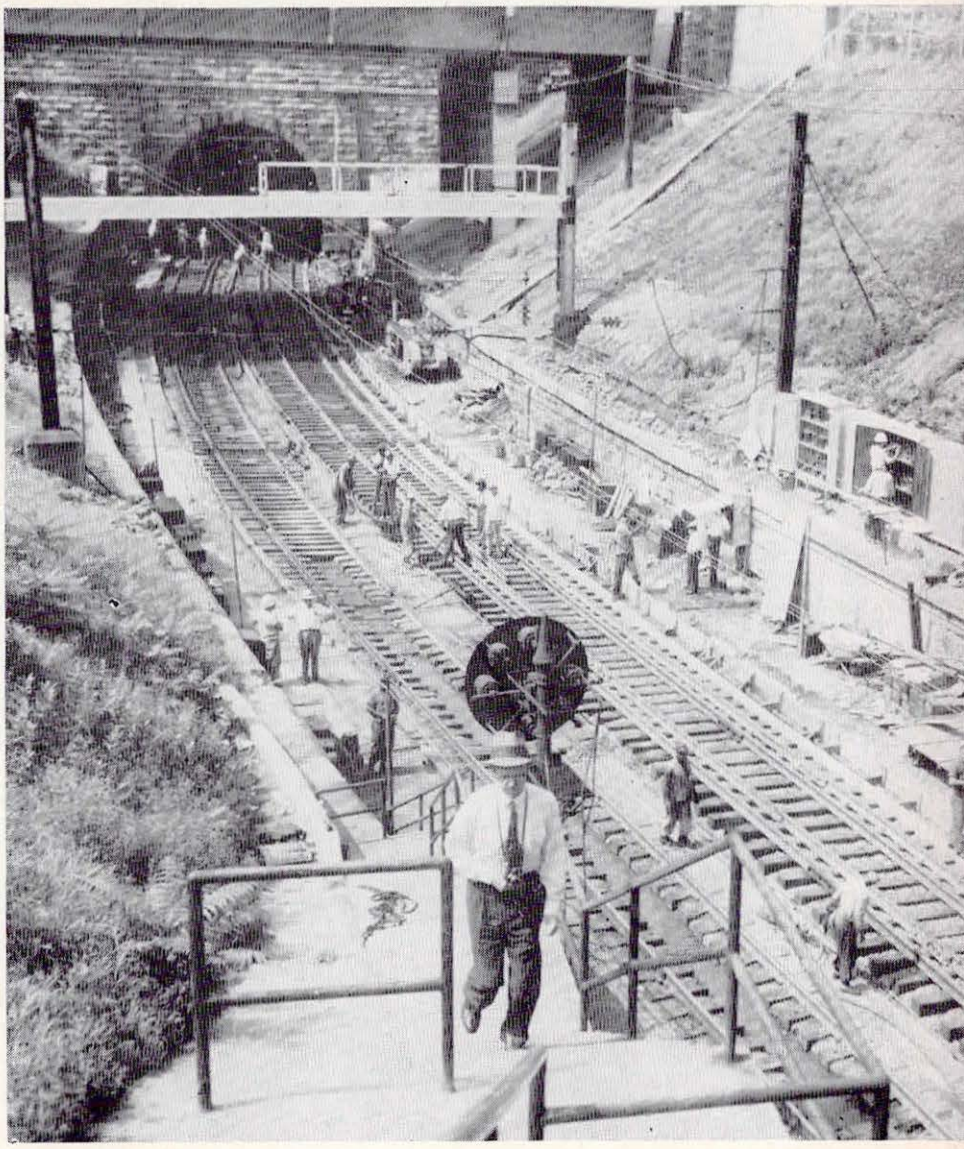
With major Southeastern roads coming into the piggyback network, PRR is increasing these clearances. All that was needed at Washington was adjustment of the catenary structure, but Baltimore was a bigger problem.

The work is costing $300,000, including alteration of 2,200 feet of wall in the 7,400-ft tunnels and installation of a "gauntlet" track at one point.

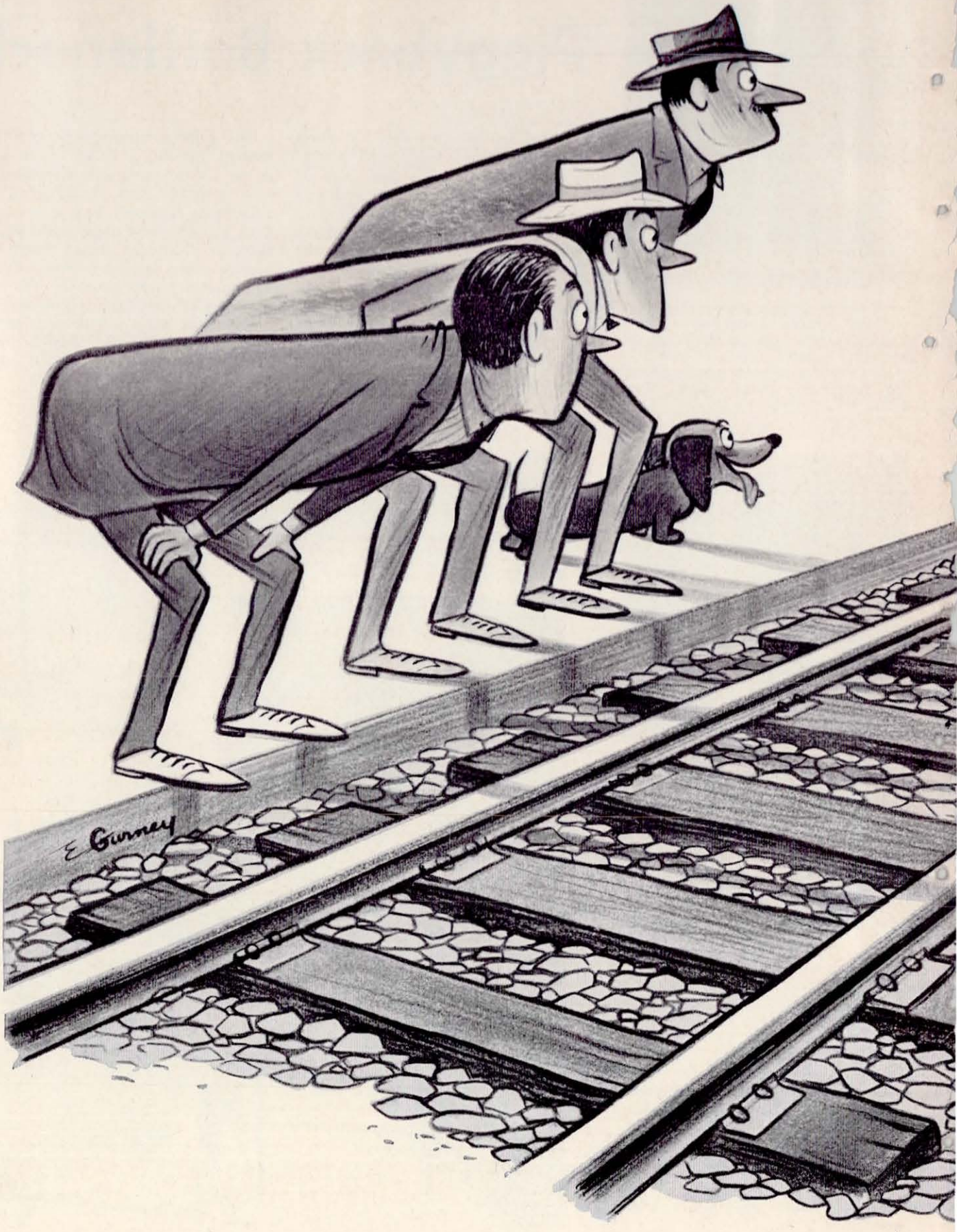
Chipping hammers were used to cut away enough of the upper walls, where they curve into the arched ceiling, to provide extra clearance. The gauntlet will provide side clearance for the overhang of extra-long piggyback cars.

Piggyback trains will be switched to the extra track as they approach the curve, following it for 928 ft, then switch back again.

▲ **INSPECTING** finishing job on tunnel walls, W. T. League (right), supervisor of structures on PRR, is accompanied by two employees of contracting firm. A total of 2,200 ft of tunnel walls was chipped away to add extra inches of clearance at the right place for trailer-loaded flat cars. A light coat of cement was sprayed over mesh to finish out the chipped area.

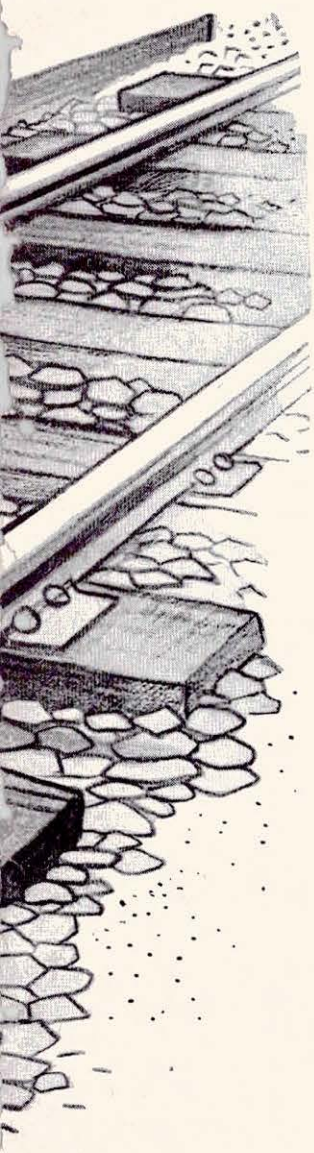


BUILDING gauntlet track, employees put rail in place on 8-deg. curve approaching tunnel entrance. Signal bridge (top, left) and new instrument case (right) will hold and control signals that govern movements on the gauntlet. Trains in tunnel on gauntlet will foul opposite main for a brief period. ▶


E Gurney

coming soon!

48 new diesel locomotive units...
1,240 new roller-bearing freight cars!



THE SOUTHERN, first major rail system in the United States to be completely dieselized, will soon put forty-eight new diesel-electric freight locomotive units in service. These locomotives, now on order, will incorporate all of the latest technological improvements in diesels and add tremendous new "muscles" to our present modern, up-to-date fleet of diesel power.

This fall, too, deliveries will start on 1,240 new roller-bearing gondola and covered-hopper freight cars. 1,205 of these cars will be of new composite aluminum-steel construction, each with a carrying capacity of 100 or more tons, which will enable the Southern to give better service in the handling of bulk materials. This is the railroad industry's first big order for this type of rolling stock and represents a pioneering break-through in the large-scale use of lightweight, corrosion-resistant materials in freight car construction.

Total cost of these additions to our freight car and diesel fleets will exceed $38 million. Our shippers and receivers will benefit from better-than-ever service to, from and within the South. Ship via Southern and see!

THE SOUTHERN SR SERVES THE SOUTH

SOUTHERN RAILWAY SYSTEM

MICROWAVE TOWER RISES in northern California near Mt. Shasta on the SP.

Railroads

► **The Story at a Glance: Microwave, the system of high-frequency radio that uses beamed signals, is moving into the railroad communications field in a big way. Eight railroads have microwave installations now—the longest stretch being the Pacific Great Eastern's 750-mile segment in western Canada. Additional segments, totaling 2,026 miles, are either under construction or will be shortly. More installations are known to be under study.**

Modern microwave equipment can provide up to 240 voice channels, or circuits, and it can be used in a wide range of assignments, including many which are of direct benefit to shippers. Present or contemplated uses include trunk circuits, printing telegraph, facsimile, closed circuit TV and CTC signal circuits.

Microwave installations on railroads in the United States and Canada will more than double within the next two years, according to figures compiled by Railway Age.

Three major projects, totaling 2,026 miles, are either in the advanced planning stage or under actual construction. This new mileage compares with the 1,272 miles now in use on eight railroads.

Here are the three new ones:

- Southern Pacific is considering a 763-mile system which, if given final approval by management, will link the present Black Butte - Dunsmuir, Cal., system (23 miles) with San Francisco and Los Angeles.
- Union Pacific reports it will begin work soon on a 563-mile system between Omaha, Neb., and Laramie, Wyo. The UP setup will provide added through circuits for data transmission and for direct distance dialing telephones.
- Motorola recently announced that it has received a contract for a 700-mile, 21-station microwave system for the Denver & Rio Grande Western. Main route of the system will run from Denver west to Salt Lake City and north to Ogden, Utah. Rio Grande says it will use the microwave link to handle facsimile transmission of waybills, train lists, wheel report forms, written messages and the like.

In addition to these projects, at least three other big roads are known to be studying microwave seriously. These projects would add around 2,500 miles more to the mileage listed in the accompanying box.

Railroad officers who have studied microwave use in rail service say it is

Shippers Can Gain from Microwave

highly adaptable for through or trunk circuits. They say it gives dependable service when stations are placed 10 to 40 miles apart—terrain being a big factor in the spacing, of course.

The beamed signals can be the answer when additional circuits are called for. But microwave is much more than a single-use facility. It has the channel capacity to handle data transmission, and its bandwidth is such that it can be used to transmit waybill information at high speed by facsimile—which can mean, among other things, faster and more accurate billing and car reporting for shippers. Its greatest use, at present, is for additional circuits for intercity dial telephones and for control circuits for VHF railroad radio.

Several roads use microwaves today to supplement existing pole lines, particularly where growing communications needs already have expanded these lines to capacity. This practice is likely to increase. One road is known to be thinking along this line: put all local communications and signal circuits on a two-crossarm pole line; handle all through circuits by microwave. The arrangement would give this road room for growth—room it will need if it goes ahead with tentative plans for an extensive intercity dial telephone system and data transmission direct to a central computer operations center.

As with anything else, however, microwave is not always the absolute answer. Situations vary. A railroad with a pole line in good condition, and with need for limited additional circuits, may find it would cost less to put carrier on existing wires. Some pairs might have to be transposed for 150 kc to handle the higher frequency carrier systems but it would still be the least expensive alternative.

There are, moreover, some things microwaves won't do—at least not without substantial cost. The open wire of pole line is better, railroad men say, when it comes to providing telephone pole boxes along the right-of-way, a message and dispatcher's telephone circuit, signal circuits such as for CTC or automatic block signals, and party-line printers in way stations. Microwave could do such jobs, but it would require repeater equipment for drop-outs at each point for local communication.

Whether microwave can entirely replace an existing pole line is still pretty much an open question—and a matter of economics. Some communications men say microwave is the best buy if a pole line is in such disrepair as to require complete rehabilitation. But even they caution that studies have to be made.

At least one road did put in microwave to replace a 50-mile pole line—but that was a peculiar case. The replaced line was in the mountains where ground frost heaved poles out of the ground, snow and ice storms broke wires and, anyway, the road relied on radio communications between wayside offices and trains and had no signal system.

If it's a case of starting from scratch with a new segment of railroad, the question of pole line or microwave often hinges on weather and terrain. One western road recently installed microwave on a new mountain branch line since, for the same investment, it could get more circuits that way. Estimated cost of the pole line was higher than usual; even the cost of digging post holes would have been higher than average because of the rocky ground. But given flat or rolling country, it seems generally conceded that a pole line is more economical, at least for first communications in an area.

But current arguments over the merits of microwave seldom stop with mere comparison of installation costs. Once installed it has to work. So discussions not infrequently turn to reliability, to clearness, power sources and maintenance.

Most advocates of microwave agree that present systems can, and do, have a reliability of 99% or better. This means that all, or any one circuit, will be inoperative only 1% of the time. And, they add, even the 1% factor can be reduced by the use of frequency diversity transmission. The latter involves simultaneous transmission on two frequencies, with receiving equipment selecting the best signal. The result is continuous reception but it does mean getting FCC approval for the additional frequencies required.

Meanwhile, barring two-frequency transmission, the possibility of even minute downtime worries some communications officers. It might be all right for a telephone circuit, they say, but what about data transmission? If transceiver or printing telegraph is used in a car reporting system, transposing or omitting a figure in a car number would be confusing, to say the least. It might create even bigger problems if payroll data were being transmitted.

Such arguments assume a degree of reliability for pole lines that may or may not exist. Figures on that point are not available. It is safe to say that line breaks do sometimes occur and, depending on geographical location, reliability varies from 98 to 100%.

The matter of clearance is closely related to microwave reliability, too, because beamed signals travel in a straight line, point-to-point, and can be lost entirely if permitted to bounce off trees, buildings or other objects. Most roads figure minimum clearance

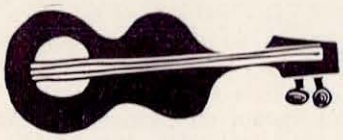
(*Continued on page 46*)

RAILROAD MICROWAVE TODAY

Railroad	Location	Mileage
Alaska	Anchorage-Portage	50
AT&SF	Beaumont-Galveston, Texas	68
	San Bernardino-Cushenbury, Calif.	56
	Topeka-Argentine, Kan.	61
CRI&P	Norton-Goodland, Kan.	106
PGE	Vancouver, B.C.-Ft. St. John-Dawson Creek	750
Southern	Adel and Valdosta, Ga.-Live Oak, Fla.	158
SP	Dunsmuir-Black Butte, Calif.	23
	Planned or Under Construction	
D&RGW	Denver, Colo.-Ogden, Utah	700
SP	Dunsmuir-San Francisco-Los Angeles, Calif.	763
UP	Omaha, Neb.-Laramie, Wyo.	563

For shipping cars

or jars



or toy guitars

The better way is Santa Fe

No matter what you ship call the nearest Santa Fe Traffic Office and let the longest railroad in the U.S.A. go to work for you.

Santa Fe

A couple of men put in strong plugs for the "case history" type of advertising. One is W. R. Hofer, traffic manager, Olympia Brewing Co., Olympia, Wash., who says he likes to read about "shipper ingenuity in solving specific problems for use of railroad service." As an example, he mentions the fact that his company effected "substantial savings" after "temperature tests and breakage experience revealed we could safely load 100,000 lb in box cars instead of traditional use of refrigerator cars with only 40,000 to 60,000 lb."

In the same vein, D. F. Hensley, traffic manager for Tung-Sol Electric, Inc., Newark, N. J., is "interested in learning how other traffic managers solve their problems. The case history type of ad used by the New York Central in their Flexi-Van series is excellent," he says. But "pictures of a brakeman giving a 'highball'—though they may bring sentimental memories to many ex-railroaders—have little value to an industrial traffic man."

Rate Details

K. C. Batchelder, traffic manager for the West Coast Lumbermen's Association, at Portland, suggests that all the subjects listed in Part 2 of the month's question are proper subjects for advertising, but thinks some of them can be publicized most effectively in magazine advertising—and others in other ways. This, he says, "is particularly true with rates. It would be very difficult, in a magazine, to go into very much detail about rates, other than perhaps to indicate how those desiring this information could get it. Details [of rates] would have to be specific for an industry, or for an individual, depending on his location and commodity to be shipped."

A good many men used their Poll ballots to comment on the general quality of railroad freight advertising.

"Railway advertising," says J. L. Miller, GTM, Birdsboro Steel Foundry & Machine Co., Birdsboro, Pa., "is too general; too stereotyped. It should be more specific; more eye-catching." R. W. Wettstyne, director of traffic for Firestone Tire & Rubber Co., Akron, Ohio, echoes Mr. Miller's sentiments. "Advertisements seem to be functional, but too impersonal," he says. "Railroads should tell people what they are doing for the benefit of the shipper and receiver [in the way of special services, schedules, routes, equipment and rates, in that order], and also how they are meeting competition. That should prove of considerable benefit to them." "It seems logical," says G. B. Miller, director of traffic, Crucible Steel Co. of America, Pittsburgh, "that railroad freight service can more readily be sold by continuing to emphasize the various specific factors that provide advantages to shippers—such as faster schedules, specialized equipment, etc."

E. F. Mickens, traffic manager, Coates Board & Carton Co., Garfield, N. J., advises the carriers to "show the public what you have to offer in the way of service, equipment and cost—but get off the emphasis on how much taxes the railroads pay." Somewhat similarly, D. H. Wetzel, assistant traffic manager, American Olean Tile Co., Lansdale, Pa., thinks "it is imperative that railroads emphasize all facets of their physical facilities and intangible services to drive home the fact that a complete rail transportation service is offered." This, he points out, may require a consistent, carefully planned campaign extending over some period of time—but would avoid the objection that "much railroad advertising today carries the same theme too long, and becomes repetitious without accomplishing its objective."

SEND FOR FOSTER'S TRACK INSPECTION KIT

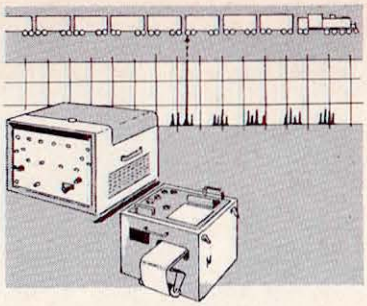
FREE easy-to-use guide simplifies and improves your industrial customers' track maintenance.

WRITE FOR INSPECTION KIT # RA-7

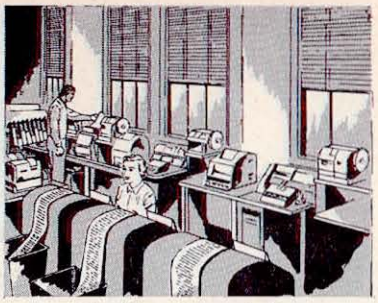
L.B. FOSTER CO.

Pittsburgh 30 Atlanta 8 New York 7
Chicago 4 Houston 2 Los Angeles 5

cTc — Centralized Traffic Control



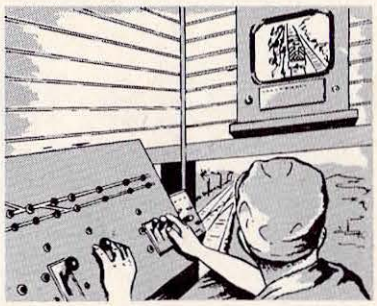
"Hot Box Detector"



Machine Records Room

Radio

"the D&H" AND THE ELECTRONICS AGE



Closed Circuit TV

Over the years the art of railroading has changed, but the function of a railroad never changes. Its job is to transport people and goods safely, comfortably, efficiently and economically. By the yardsticks that measure these performances, The D. & H. has always been among the leaders in the railroad industry.

To perform its function better, The D. & H. has adopted the marvels of technology and the *Electronics Age* that lend themselves to railroad operations.

To better serve shippers and consignees, it has installed at Albany a MACHINE RECORDS ROOM equipped with electronic machines which receive from all of its terminals and interchange points records of the movements of every car on the Railroad. Each yard office is equipped with machines and tape transmitters that have direct communication with adjoining yards and the MACHINE RECORDS ROOM. Within minutes after a train departs from a yard a record of every car in the train is transmitted automatically to headquarters and then by teletype service to traffic offices in New York, Montreal, Portland, Me., Boston, Buffalo, Philadelphia, Cleveland and Chicago, thus providing finger tip information for shippers. These records are also used for revenue accounting purposes. Other electronic machines at headquarters provide statistics and data by "push button" methods.

RADIO is used for communication between yard offices and train crews, between head and rear ends of trains and for communication between trains, greatly enhancing the efficiency and speed of train operations.

CENTRALIZED TRAFFIC CONTROL – cTc – controls movements of trains on hundreds of miles of track from a centralized location, electronics permitting remote control of outlying switches and their snow melting devices.

CLOSED CIRCUIT TV is used where necessary at grade crossing to further the safety of the public.

ELECTRONIC "HOT BOX" DETECTORS ingeniously discover overheated journals ("hot boxes") and wheels and convey the information automatically to dispatchers who relay it to train crews so that the cars can be given proper attention.

Pick and shovel methods have largely disappeared in maintaining tracks and structures. New and ingenious machines automatically do this work more efficiently and at much less cost.

To provide these "tools" it is necessary that The D. & H. have satisfactory earnings and fair treatment so that it can always produce better and safer service for those who entrust their persons and their goods to its care. Only in this manner can The Delaware and Hudson continue to remain in the forefront of progress.

DELAWARE & HUDSON RAILROAD
CORPORATION
The Bridge Line Connecting the South and West with New England and Eastern Canada

J. L. Quarles, Jr.
C&O

W. J. Eck
C&O

Joseph L. Bart, Jr.
T&NO

Floyd Thomas Ridley
Morrison

People in the News

BOSTON & MAINE.—Dwight A. Smith Jr., general manager of the **Springfield Terminal Railway,** Springfield, Vt., has resigned from that post to become regional sales manager for the B&M in Portland, Me.

CANADIAN NATIONAL.—Frank M. Ward, general superintendent of transportation, Atlantic region, Moncton, N.B., retires Sept. 30.

Robert J. Jessiman appointed mechanical car inspector, Atlantic region, Moncton. Mr. Jessiman was formerly relieving assistant foreman at Moncton.

W. B. Edey, superintendent, Allandale (Ont.) division, transferred to the Stratford (Ont.) division, succeeding **E. P. Burns** (RA, Sept. 21, p. 68).

G. A. Duthie appointed system supervisor, piggyback operations, Montreal.

Warren H. MacKenzie, division freight agent, Moncton, N. B., transferred to Halifax, N. S.

CHESAPEAKE & OHIO.—J. L. Quarles, Jr., staff assistant, office of the president, appointed assistant to the president, Cleveland.

W. J. Eck, assistant general purchasing agent, appointed administrative planning officer in the Purchases and Stores department, Cleveland. Mr. Eck also will be responsible for organization planning and personnel training in that department.

W. M. S. Dunn, staff engineer, appointed staff assistant to chief engineer—system, Huntington, W. Va.

At Huntington, W. Va.: **D. S. Bradley,** general superintendent computer applications, appointed assistant general superintendent transportation; **R. W. Cassidy,** assistant superintendent car records, appointed superintendent car accounts and car records; **A. W. Duke,** superintendent car records, named assistant superintendent car accounts and car records; **T. E. Briers,** assistant supervisor work simplification, appointed chief methods research officer; **J. D. Maxey, Jr.,** methods officer, named methods research officer. Abolished positions formerly held by Messrs. Bradley, Briers and Maxey.

MISSOURI-KANSAS-TEXAS. — E. A. Bohmeyer, freight sales manager, St. Louis, transferred to Denison, Tex. to head the newly established special service and customers' relations department. **J. H. Hieger** and **F. E. Whitmore** named assistant general freight agents, St. Louis.

NEW YORK CENTRAL.—F. A. Danahy appointed general supervisor diesel locomotive maintenance, and **R. J. Murphy** and **G. McGonegal** appointed assistant general supervisors diesel locomotive maintenance, all at New York.

Andrew G. Sencak, superintendent—dining and sleeping car service, Buffalo, N.Y., transferred to New York to succeed the late **Thomas H. Byrne. Ralph L. Croft,** superintendent—food standards and control, New York, succeeds Mr. Sencak at Buffalo. **Paul E. Kennedy,** assistant superintendent — food standards and control, succeeds Mr. Croft and is replaced by **Matthew Scavarelli. Donal K. Cahill** appointed supervisor of personnel, succeeding Mr. Scavarelli.

TEXAS & NEW ORLEANS—Joseph L. Bart, Jr., assistant public relations manager, appointed public relations manager, Houston.

Supply Trade

Floyd Thomas Ridley has been appointed vice president—sales, development and traffic for **Morrison Railway Supply Corp.,** Buffalo, N.Y., effective Oct. 1. Mr. Ridley is presently director of operations and traffic for Republic Tank Car Co., New York.

Paul D. Howard, railroad trades sales supervisor for **Minnesota Mining & Manufacturing Co.,** has been promoted to railroad trades market manager, reflective products division, St. Paul, Minn.

Industrial Traffic

Myron B. Smith has been appointed to the newly created position of general traffic manager, Boyle-Midway division of **American Home Products Corp.** at 22 East 40th Street, New York. Mr. Smith was formerly assistant to director of traffic for the corporation.

Ray Walther, traffic manager, Southeastern division, **The Great A & P Tea Co.,** retired Aug. 31.

Berthold M. Fischer has been appointed general traffic manager of the paperboard converting operations of **Weyerhaeuser Co.** at Chicago. The operations were formerly known as the Kieckhefer-Eddy division. Mr. Fischer was formerly general traffic manager of the National Can Corp.

R. E. Harridge traffic manager, **Allied Mills, Inc.,** has been promoted to assistant general traffic manager, Chicago.

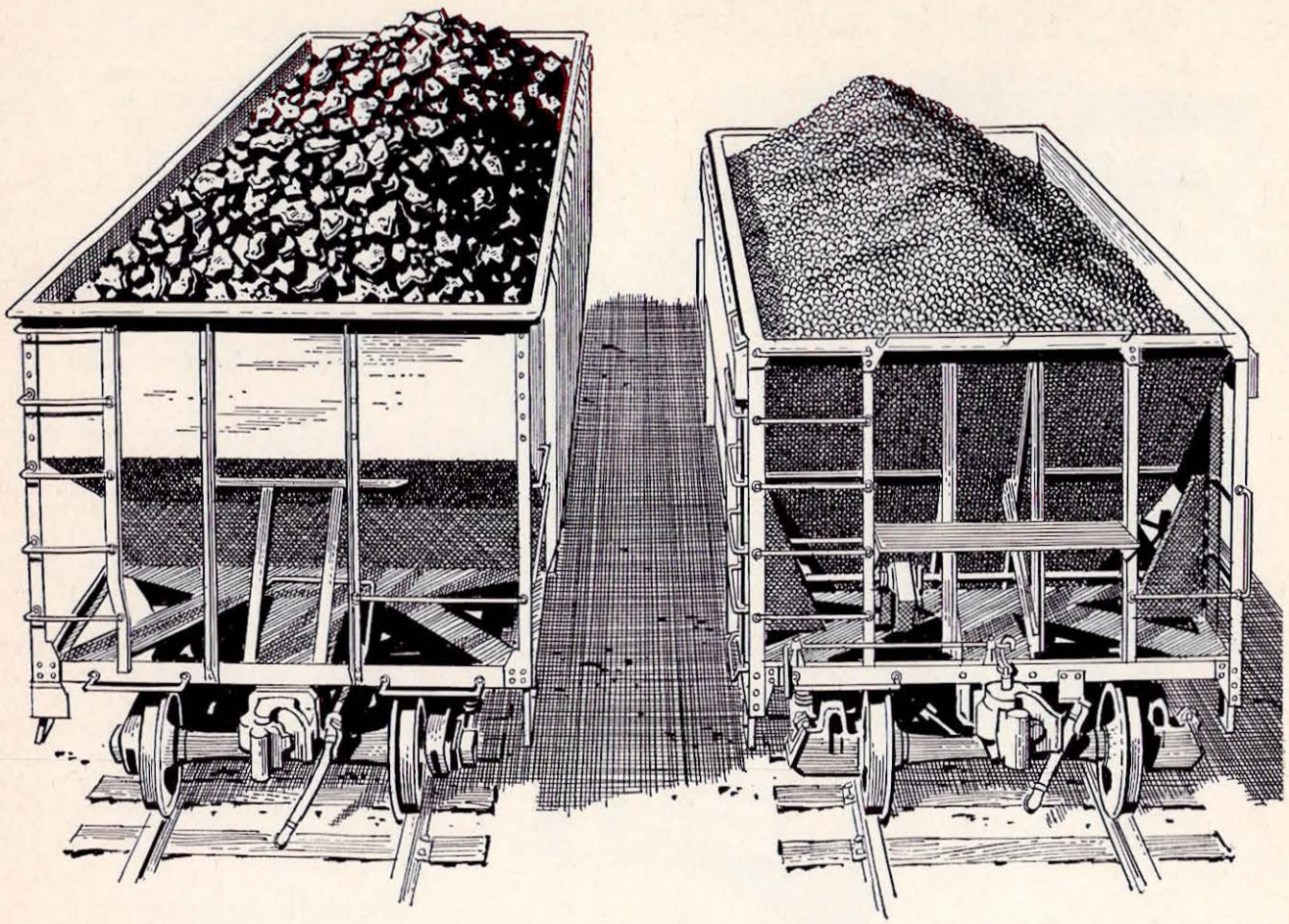
Donald B. Gill, traffic manager, **Kelvinator division of American Motors Corp.,** at Detroit, has been promoted to divisional traffic manager at Grand Rapids, succeeding **Carl Zemen,** resigned. **Richard J. Caroselli,** assistant traffic manager for **Bohn Aluminum & Brass Corp.,** Detroit, has been named traffic supervisor for Kelvinator at Detroit replacing Mr. Gill.

Charles M. Hinesley has been named assistant traffic manager, **Victor Chemical Works,** to replace **Theodore J. Kessler,** promoted to assistant director of traffic.

Edward J. Finnegan, 53, traffic manager of the Metals Division, **Olin Mathieson Chemical Corp.,** died Aug. 26 of a heart attack at Alton, Ill.

HAYES One Train Master says a Type SF Cushion Wheel Stop is all you need at the end of any track, where switching is done in a reasonable manner. More than 36,000 tracks have this protection.

Hayes Track Appliance Co., Richmond, Indiana



Lignite and Taconite

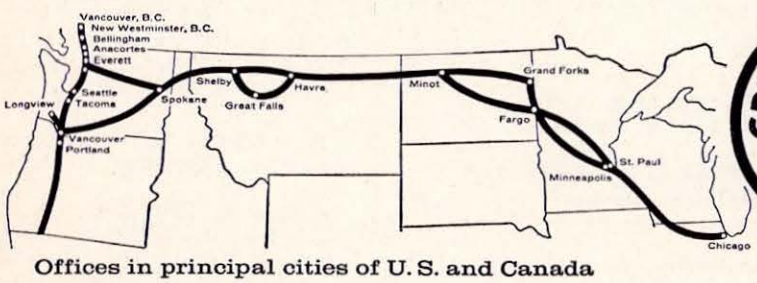
an abundant coal, a plentiful iron ore that together may spell a brighter future for us all

Under vast areas of North Dakota lie billions of tons of lignite—representing the nation's greatest reserve of fossil fuel. And in northern Minnesota, connected by Great Northern rails with Dakota's lignite beds, are enormous reserves of taconite. A form of iron ore, taconite requires processing in the Midwest before shipment via the Great Lakes to the big steel mills in Gary, Pittsburgh and other points.

To tap these two tremendous national resources Great Northern Railway is underwriting extensive research programs designed to find a method of beneficiating taconite and of utilizing lignite in the process.

We have, of course, a large stake in the ultimate success of this venture, for our lines serve both the lignite and taconite reserves. But of even greater import is the potential impact of this industrial research on the economies of these two mineral-rich states, and its value to the entire nation.

Our lignite and taconite research project provides new evidence that *progress is a Great Northern habit.*



Offices in principal cities of U. S. and Canada

GREAT NORTHERN RAILWAY

Write: *A. J. Haley, Director, Mineral Research and Development Department, Great Northern Railway, St. Paul 1, Minnesota.*

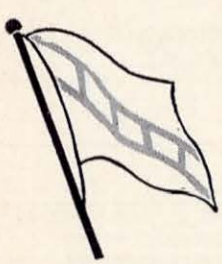
You can't use the same medicine for Measles and Mumps

For some things you need a specialist!

- To stop choking costs
- To cure delivery problems
- To innoculate against damage losses

Call your SEATRAIN-SEAMOBILE specialist for the right prescription and the right rate!

SEATRAIN serves the ports of New York, Savannah, New Orleans and Texas City on regular schedule. Your booking is guaranteed. SEAMOBILE gives consistent six day service between the ports of New York and Texas City with sailings every Tuesday and Thursday in each direction.



SEAMOBILE
SEATRAIN LINES *Inc.*

Offices in Boston • Savannah
New Orleans • Houston • Dallas

711 Third Ave., New York 17, N.Y.

Shippers' Guide

Chesapeake & Ohio

. . . *Service Changes*

Has inaugurated LCL way car, Ludington, Mich., to Scottville to Walhalla; also substitute highway trucking service from Grand Rapids, Mich., to and from Baldwin, Reed City, Hersey and Evart. Has discontinued LCL way cars from Ludington to Scottville to Evart, and from Grand Rapids to Reed City, Hersey and Evart.

Louisville & Nashville

. . . *Schedule Changes*

Has changed running times of freight trains 83-79, to leave Nashville, Tenn., 6 a.m.; arrive Decatur, Ala., 10:30 a.m.; arrive Birmingham 1:30 p.m.; leave Birmingham 4:30 p.m., and arrive Montgomery 9 p.m. Pensacola section leaves Montgomery 10 p.m., arrives 6 a.m. Mobile-New Orleans section leaves Montgomery 11 p.m.; arrives Mobile 6:10 a.m.; leaves 7:40 a.m., arrives New Orleans 2 p.m. Times north of Nashville are unchanged. Connecting trains leave Louisville 6:30 p.m., arrive Nashville 1:45 a.m.; leave East St. Louis 1:15 p.m. and Evansville, Ind., 8:30 p.m. for 3 a.m. arrival in Nashville.

Norfolk Southern

. . . *New Merchandise Service*

Has inaugurated 24-hr "Tarwheel" merchandise service on a daily basis in both directions between Norfolk, Va., and Charlotte, N. C. LCL freight received in Norfolk by noon arrives Charlotte for delivery next afternoon.

Santa Fe

. . . *Service Changes*

Has established merchandise car lines between Albuquerque and Clovis, N.M.

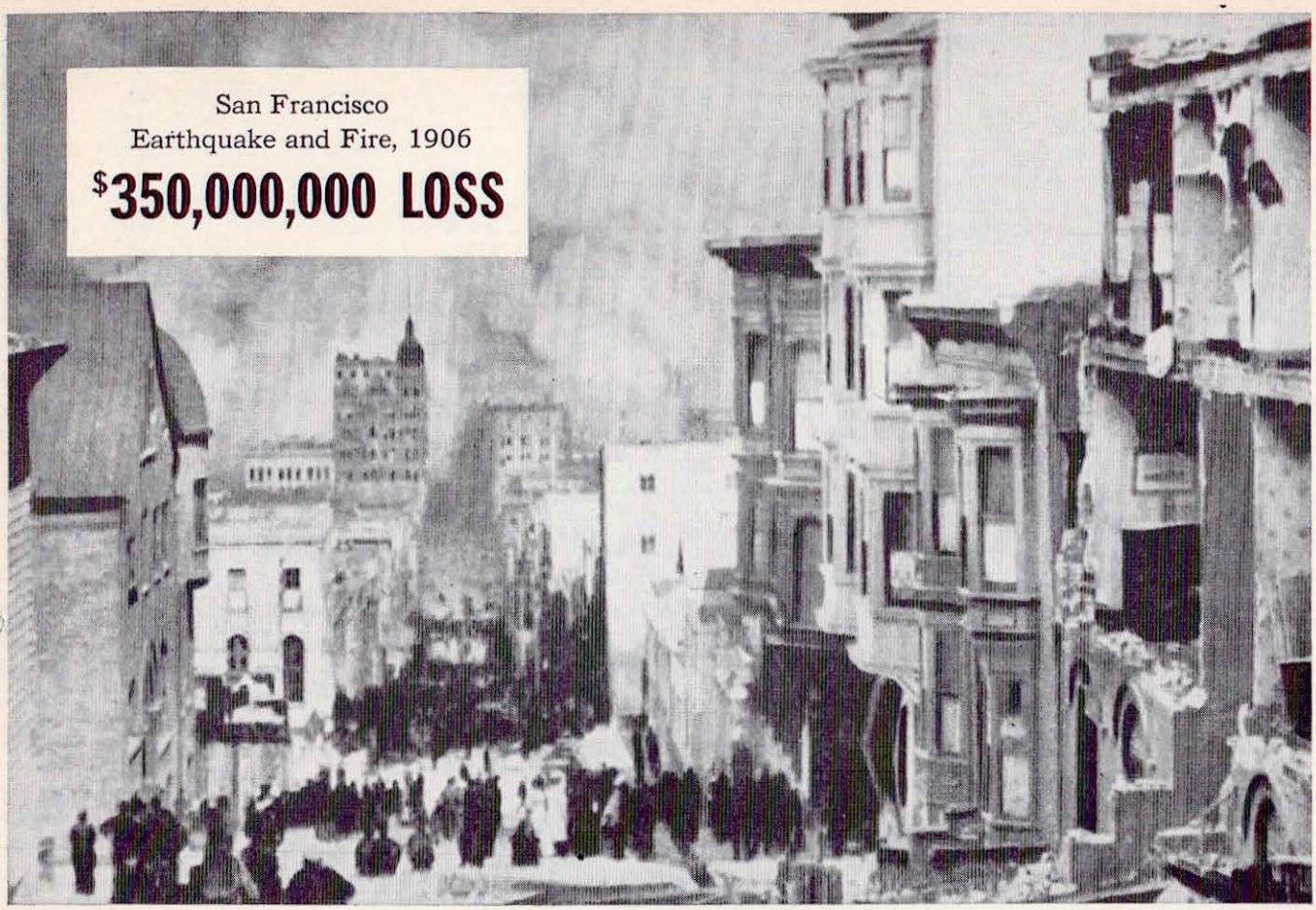
Traffic Publications

NATIONAL SPEEDLOADER CONTAINER HANDLING SYSTEM. 6 pages, illustrations. Bulletin 13959, Dept. RA, Transportation Products Division, National Malleable & Steel Castings Co., 10600 Quincy ave., Cleveland 6, Ohio.

Describes and illustrates National Malleable's patented unit loading system for automatic transfer of land, marine and air cargo containers (RA, July 27, p. 67).

INFRARED CAR THAWING. 8 pages, illustrations. Form 59-123, Dept. RA, Fostoria Corp., Fostoria, Ohio.

Covers the Fostoria system of thawing frozen loads by application of electrically-generated infrared heat.



RAILROAD FEATHERBEDDING

$500,000,000 LOSS

TO THE NATION—INCLUDING YOU—EVERY YEAR

One of the greatest disasters of all time was the San Francisco earthquake and fire of 1906. Property damage of $350,000,000 shocked the world.

Yet America's railroads suffer a needless loss equal to that disaster **every nine months!**

It's the loss from railroad featherbedding—pay for work not performed or not needed—that costs the shipping and traveling public in this country **$500,000,000 every year.**

Earthquakes cannot be prevented but featherbedding can.

Everybody pays the hidden toll of featherbedding. That's why the forthcoming negotiations between the railroads and the unions are so urgently important to the whole nation. The railroads will seek the agreement of the unions in lifting this featherbedding burden from the American people so that our country may have the unexcelled rail service a dynamic economy demands.

OBSOLETE WORK RULES

are responsible for featherbedding — not the employees who must obey them. Only the operating employees are involved. For example:

Diesel freight locomotives, unlike steam locomotives, have no fires to tend but featherbed rules still demand a fireman — the **third** man in the diesel cab, since the head-end brakeman also rides there.

Total cost for unneeded firemen—$200,000,000 each year.

— this is featherbedding!

AMERICAN RAILROADS

 (*Continued from page 39*)

for the signals at 50 to 75 ft above ground, depending in part on the terrain and length of hop involved. Towers in flat country do have to be high to be on the safe side—and this means painting and lighting them in accordance with federal regulations. This is one problem that pole lines avoid entirely. Their only clearance difficulty may stem from occasional conflict with highways or power lines.

The line-of-sight transmission that microwave employs means that it can jump cross country between stations and need not follow the right-of-way. While this can be cited as an advantage over a pole line, which must follow the railroad, it does create a new handicap. Microwave stations are often remote from a power source. A gasoline or diesel engine generator may be required to provide standby power if the normal set fails. Where commercial power is available, as it is at most points, a line is generally run in to the microwave station. But a repeater station in a remote location, with only one commercial power feed available, may still need a standby generator as a precaution.

At microwave terminals, however, this would be no problem since commercial power with no more than one feed is usually available.

Pole line facilities, in contrast, are normally in areas where commercial or railroad power is readily available. While no standby power is required, some roads have placed engine generators at yards and other major points.

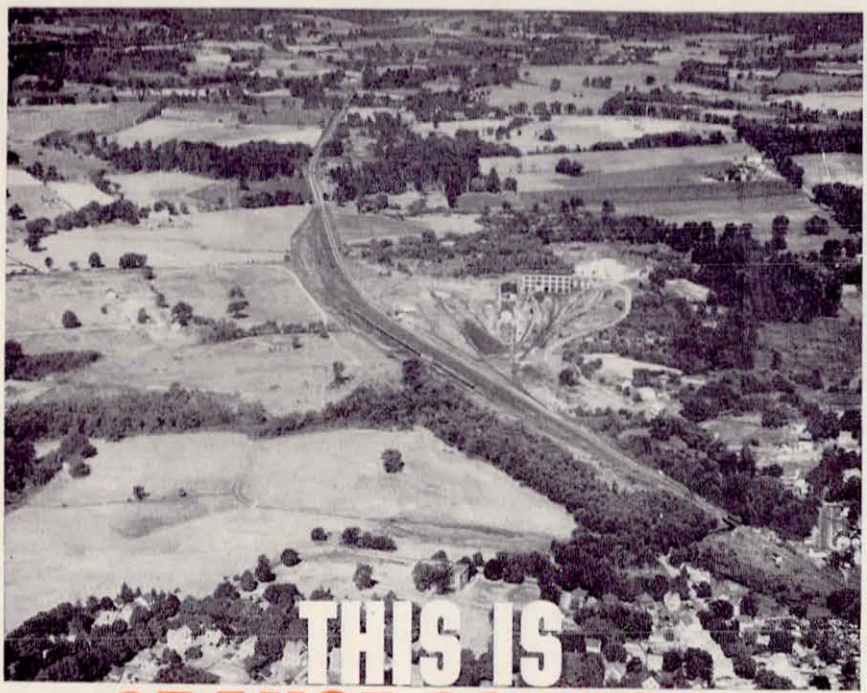
Land is still another factor a railroad must consider in studying the relative merits of microwave. This is less a factor with a pole line, which is usually on the right-of-way. With microwave, only the terminal stations may be on railroad property. The road may have to purchase additional land for repeater stations, including, in some cases, an access strip from a highway.

Mountains Can Be an Advantage

Terrain is, as noted earlier, an important consideration. Mountains and hills can actually be an advantage in microwave since, with the higher elevations, stations can be spaced farther apart. This is one place where microwave gains advantage fast, for the more rugged the countryside the more difficult and costly it becomes to build and maintain pole lines.

Fast, efficient and reliable communications are so vital to railroad operation that high maintenance of facilities, whatever the type, is not open to debate. There are, however, some significant differences in what may be required for microwave as compared with a pole line setup. To some extent it's a matter of geography: with the former, maintenance work is concentrated at terminals and repeater stations; with the latter, it can occur anywhere the wires run.

Railroads that now use microwaves report they need fewer maintenance men, as a rule. But these men have to be skilled technicians (microwave maintainers must have a second-class FCC license, for one thing). Overall, the cost of keeping a microwave system in top-drawer condition seems to run somewhat less than for pole lines, particularly in hard-winter country. Moreover, since most of the equipment is in locked housings, there is less damage from vandalism. If a failure does occur in a circuit, the microwave maintainer has the added advantage of having fewer places to search for trouble.



ORANGE COUNTY
NEW YORK
Your industrial opportunity!

Locate in the Hub of the rich Eastern Markets
L & H R Industrial land
with gateways to New England, New York, New Jersey, Pennsylvania and the Midwest.
A favorable business climate, all utilities, rail and highway transportation, finest education and recreational advantages.
Good State and Local cooperation.
Aerial surveys, maps and data on sites available.
Contact or write:

R. C. WINCHESTER, G.F.T.M.
L&HR RAILROAD WARWICK, N. Y.
LEHIGH and HUDSON RIVER
RAILWAY COMPANY
RADIO EQUIPPED

Get fast, safe, effective cleaning with

AEROWASH-A

all-purpose liquid cleaner for painted surfaces

HERE'S A NEW PRODUCT that will get all of your painted surfaces cleaner than ever before—yet is completely safe on paint!

Clean diesel exteriors with Aerowash-A! It's ideal for either hand brushing or machine cleaning.

Clean interiors with Aerowash-A! There's no fire hazard when you use AEROWASH-A. And your crew will like its pleasant odor. Ideal for both diesels and passenger cars.

Reduce labor costs with Aerowash-A! The faster, more effective cleaning action of AEROWASH-A means your men can do the job in less time. And there's no powder to dissolve. Just dilute it and it's ready to go. What's more, AEROWASH-A can even be piped directly into automatic cleaning operations.

Get more details on AEROWASH-A now . . . just ask your Wyandotte cleaning specialist. *Wyandotte Chemicals Corporation, Wyandotte, Michigan. Also Los Nietos, California, and Atlanta, Georgia. Offices in principal cities.*

Wyandotte CHEMICALS

REG U S PAT OFF.

J. B. FORD DIVISION

SPECIALISTS IN RAILROAD CLEANING PRODUCTS

Freight Operating Statistics of Large Railroads—Selected Items

Region, Road and Year		Miles of road operated	Locomotive Miles: Train miles	Locomotive Miles: Principal and helper	Locomotive Miles: Light	Car Miles: Loaded (thousands)	Car Miles: Per cent loaded	Ton-miles (thousands): Gross excl. locos & tenders	Ton-miles (thousands): Net rev. and non-rev	Road-locos. on lines: Serviceable: Unstored	Road-locos. on lines: Serviceable: Stored	Road-locos. on lines: B.O.	Road-locos. on lines: Per cent B.O.
New Eng. Region													
Boston & Maine	1959	1,559	214,797	215,129	3,870	7,859	41.6	551,667	221,033	74	1	27	26.5
	1958	1,559	213,751	214,231	3,664	7,663	59.4	546,822	210,644	63	17	8	9.1
N. Y., N. H. & Hartfd	1959	1,739	250,066	250,066	17,890	10,310	65.0	685,752	286,734	66	..	15	18.5
	1958	1,739	238,034	238,034	13,324	9,762	61.7	656,436	258,290	76	3	10	11.2
Great Lakes Region													
Delaware & Hudson	1959	764	154,979	156,642	1,933	7,673	66.7	537,428	273,864	34	..	6	15.0
	1958	764	145,275	146,446	1,171	7,002	61.3	504,560	240,825	33	3	6	14.3
Del., Lack. & Western	1959	918	220,017	225,991	11,817	10,005	65.4	692,797	294,667	58	..	3	4.9
	1958	927	223,971	228,570	9,346	9,659	63.5	662,967	271,755	56	..	7	11.1
Erie	1959	2,199	558,530	561,040	14,596	28,840	65.0	1,920,283	749,995	174	..	1	.6
	1958	2,207	471,847	474,223	10,007	26,230	66.2	1,678,599	640,788	164	8	2	1.1
Grand Trunk Western	1959	951	218,322	218,896	1,376	6,979	58.4	508,232	195,300	51	9	23	27.7
	1958	951	190,149	191,183	1,119	6,407	59.4	460,877	177,057	44	15	17	22.4
Lehigh Valley	1959	1,114	185,843	188,086	3,975	8,257	66.6	562,265	258,637	28	..	6	17.6
	1958	1,118	187,792	190,102	3,299	8,187	64.5	568,185	257,502	29	..	5	14.7
New York Central	1959	10,387	2,020,042	2,031,403	91,966	86,463	58.4	6,790,790	2,921,979	432	..	53	10.9
	1958	10,470	1,920,670	1,930,512	77,497	76,513	54.9	5,924,113	2,542,631	429	20	38	7.8
New York, Chic. & St. L	1959	2,155	601,407	601,407	4,606	27,661	64.5	2,011,295	898,541	101	30	7	5.1
	1958	2,155	532,111	535,181	3,811	23,882	61.3	1,725,827	718,196	128	26	4	2.5
Pitts. & Lake Erie	1959	221	59,115	59,115	....	2,740	66.1	252,190	126,075	14	..	3	17.6
	1958	221	51,996	51,996	43	2,093	61.7	193,592	118,935	17	..	3	15.0
Wabash	1959	2,379	494,659	494,977	3,994	21,321	62.5	1,490,796	589,582	114	..	..	..
	1958	2,379	432,508	433,402	3,830	18,520	62.2	1,280,939	493,881	115	..	2	1.7
Central Eastern Region													
Baltimore & Ohio	1959	5,802	1,325,459	1,431,543	112,926	59,565	60.5	4,784,987	2,370,814	379	60	26	5.6
	1958	5,830	1,218,014	1,302,660	86,161	57,170	60.7	4,253,794	2,035,849	418	112	27	4.8
Bessemer & Lake Erie	1959	203	67,870	72,294	216	3,491	62.0	405,836	263,491	16	..	..	..
	1958	208	40,421	43,090	100	1,715	60.6	212,389	140,682	13	1	..	..
Centra RR Co. of New Jersey	1959	597	116,138	117,530	6,116	4,345	64.4	339,393	182,579	60	..	5	7.7
	1958	600	101,591	102,757	5,291	3,950	64.1	303,769	155,733	57	..	3	5.0
Chicago & Eastern Ill	1959	863	110,178	110,178	2,019	5,457	63.7	423,045	214,809	25	..	5	16.7
	1958	863	126,504	126,504	2,637	4,789	62.3	365,742	177,498	26	..	3	10.3
Elgin, Joliet & Eastern	1959	205	68,179	69,315	....	2,446	61.3	203,947	109,726	44	..	..	..
	1958	236	59,360	60,009	....	1,833	61.7	149,344	79,820	33	9	2	4.5
Pennsylvania System	1959	9,865	2,764,236	2,900,807	180,363	118,953	64.4	8,997,724	4,330,835	738	..	70	8.7
	1958	9,899	2,468,520	2,599,145	164,975	106,251	61.7	8,106,548	3,792,323	687	91	80	9.3
Reading	1959	1,302	301,109	302,668	9,355	11,291	62.3	960,272	518,628	152	4	17	9.8
	1958	1,302	265,361	266,891	8,770	10,159	57.2	887,611	452,479	135	12	41	21.8
Western Maryland	1959	844	148,679	155,024	8,655	6,455	64.7	570,077	326,547	36	..	1	2.7
	1958	844	136,979	140,536	6,369	5,365	59.4	477,770	266,559	39	5	1	2.2
Pocahontas Region													
Chesapeake & Ohio	1959	5,061	1,159,885	1,163,007	21,091	56,711	56.8	5,047,940	2,838,822	580	10	39	6.2
	1958	5,066	1,130,152	1,133,692	21,352	54,155	55.9	4,848,590	2,734,940	597	3	19	3.1
Norfolk & Western	1959	2,116	595,140	616,881	31,855	31,608	57.8	3,114,619	1,726,455	148	22	11	6.1
	1958	2,109	598,327	637,344	49,019	31,277	56.1	3,034,948	1,667,116	174	49	8	3.5
Rich., Fred. & Potomac	1959	110	38,093	38,093	799	2,372	66.8	153,844	62,204	14	..	1	6.7
	1958	110	42,241	42,241	850	2,696	59.2	179,145	62,741	11	4	..	..
Virginian	1959	608	135,265	137,485	3,395	7,023	55.5	672,044	383,657	53	12	12	15.6
	1958	608	141,874	144,319	3,605	7,265	53.2	709,809	398,747	50	15	14	17.7
Southern Region													
Atlantic Coast Line	1959	5,290	611,370	611,370	6,062	22,399	58.0	1,723,326	780,062	117	..	1	.8
	1958	5,297	666,844	666,844	6,107	22,210	55.2	1,678,397	693,907	120	8	2	1.5
Central of Georgia	1959	1,712	190,682	190,682	1,903	7,316	64.4	560,304	273,946	35	..	1	2.8
	1958	1,730	182,930	182,930	1,743	6,572	61.6	514,405	231,286	33	..	2	5.7
Florida East Coast	1959	572	88,744	88,744	50	2,700	53.6	219,212	81,313	49	1	4	7.4
	1958	571	107,325	107,325	360	2,993	54.3	238,312	90,707	58	..	5	7.9
Gulf, Mobile & Ohio	1959	2,717	256,171	256,171	207	13,933	67.2	985,079	473,571	85	..	6	6.6
	1958	2,717	249,629	249,629	90	12,821	63.7	915,286	421,065	86	..	5	5.5
Illinois Central	1959	6,439	979,438	979,438	26,261	43,261	62.6	3,176,508	1,490,252	187	27	162	43.1
	1958	6,497	934,289	934,289	25,738	41,140	60.9	3,036,816	1,389,731	209	79	79	21.5
Louisville & Nashville	1959	5,679	872,045	872,739	14,351	34,797	61.8	2,696,678	1,351,053	161	..	8	4.7
	1958	5,680	845,846	846,746	14,994	33,090	57.9	2,608,899	1,258,479	154	..	2	1.3
Seaboard Air Line	1959	4,135	592,435	592,435	2,509	22,581	59.3	1,761,525	799,524	134	..	5	3.6
	1958	4,135	634,466	634,466	2,752	22,360	57.3	1,733,039	723,775	146	..	5	3.3
Southern	1959	6,243	830,762	830,918	8,884	38,885	64.7	2,707,851	1,275,161	197	1	3	1.5
	1958	6,249	784,508	784,724	8,963	34,482	61.1	2,439,098	1,094,784	175	1	15	7.9
Northwestern Region													
Chicago & North Western	1959	9,251	890,780	890,780	9,411	35,470	61.5	2,561,985	1,064,100	170	..	9	5.0
	1958	9,291	766,676	766,676	10,024	28,970	61.7	2,161,830	869,100	169	..	10	5.6
Chicago Great Western	1959	1,437	135,218	135,218	188	6,994	66.7	494,163	231,809	25	..	2	7.4
	1958	1,437	126,593	126,593	185	6,422	65.5	455,836	210,836	25	..	1	3.8
Chic., Milw., St. P. & Pac	1959	10,583	861,334	870,311	13,134	41,253	65.2	2,881,663	1,318,514	318	8	10	3.0
	1958	10,583	817,725	829,252	13,062	36,152	63.4	2,538,575	1,131,684	271	15	13	4.3
Duluth, Missabe & Iron Range	1959	557	139,026	139,347	707	7,644	51.0	852,548	506,304	67	17	4	4.5
	1958	562	91,146	91,468	693	4,904	51.2	545,808	338,017	74	27	5	4.7
Great Northern	1959	8,281	964,247	968,738	21,876	42,797	62.9	3,288,988	1,596,207	270	..	11	3.9
	1958	8,262	881,898	885,531	24,876	37,635	62.9	2,844,096	1,349,927	262	7	..	..
Minneap., St. P. & S. St. Marie	1959	4,169	364,469	365,593	642	13,755	66.1	953,124	445,994	91	8	2	2.0
	1958	4,169	359,450	360,196	791	11,870	66.7	799,150	377,975	86	9	3	3.1
Northern Pacific	1959	6,533	776,341	782,687	8,275	33,687	65.7	2,348,058	1,066,214	239	2	6	2.4
	1958	6,533	690,486	698,085	9,798	29,911	64.0	2,108,809	939,102	210	12	7	3.1
Spokane, Portland & Seattle	1959	935	141,867	141,867	1,231	6,146	73.9	365,195	171,000	55	..	1	1.8
	1958	935	130,432	130,432	1,181	5,705	73.1	380,730	181,977	57	..	..	..
Central Western Region													
Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.)	1959	12,996	2,970,400	3,105,813	69,951	125,226	62.0	9,151,949	3,470,403	624	..	20	3.1
	1958	13,097	2,291,032	2,422,626	55,336	110,319	63.0	7,922,887	3,028,532	581	6	103	14.9
Chic., Burl. & Quincy	1959	8,652	1,039,480	1,036,941	21,417	43,842	64.9	3,050,586	1,349,509	140	7	74	33.5
	1958	8,698	911,782	908,554	22,577	39,314	65.2	2,676,718	1,168,360	129	28	65	29.3
Chic., Rock I. & Pac	1959	7,508	1,114,316	1,114,120	2,710	43,872	62.8	3,163,639	1,325,780	190	..	6	3.1
	1958	7,560	970,830	967,689	3,516	38,555	60.6	2,873,423	1,196,647	179	..	7	3.8
Denver & R. G. Wn	1959	2,128	296,469	314,660	26,714	13,699	72.4	966,770	472,888	80	7	8	8.4
	1958	2,155	249,322	265,456	22,274	13,068	74.5	886,312	438,016	81	9	7	7.2
Southern Pacific	1959	8,011	2,350,976	2,442,261	145,077	110,864	64.8	7,785,400	3,193,282	709	3	26	3.5
	1958	8,025	2,089,851	2,173,508	111,681	97,881	62.0	6,901,534	2,720,753	668	19	73	9.6
Union Pacific	1959	9,743	2,137,373	2,155,972	49,876	99,968	66.8	6,673,069	2,850,460	334	19	99	21.9
	1958	9,753	1,832,810	1,867,000	55,069	90,524	65.9	6,062,370	2,557,446	321	70	87	18.2
Western Pacific	1959	1,188	280,905	288,603	27,870	10,970	67.1	728,913	310,752	45	..	1	2.2
	1958	1,189	221,664	228,707	23,509	10,154	70.7	666,667	302,219	45	..	2	4.3
Southwestern Region													
Kansas City Southern	1959	886	126,183	126,183	155	8,159	64.9	624,638	294,103	22	..	1	4.3
	1958	886	106,754	106,754	66	6,582	66.6	475,457	215,421	22	..	1	4.3
Louisiana & Arkansas	1959	746	83,866	83,866	....	3,917	66.3	303,456	147,072	18	..	..	..
	1958	746	66,818	66,818	42	3,160	62.1	250,781	115,932	17	..	..	..
Mo.-Kans.-Texas Lines	1959	2,916	215,909	215,909	2,107	11,785	67.2	864,117	397,257	61	..	4	6.2
	1948	3,059	238,483	238,483	2,262	11,221	61.2	819,784	381,282	79	..	2	2.5
Missouri Pacific	1959	9,440	1,179,834	1,179,834	8,962	54,770	64.1	3,930,855	1,791,262	214	6	18	7.6
	1958	9,530	1,070,241	1,070,241	8,045	47,568	62.8	3,455,963	1,547,329	192	16	15	6.7
St. Louis-San Francisco	1959	4,528	597,434	597,434	5,713	24,099	69.2	1,651,797	798,195	99	..	10	9.2
	1958	4,558	548,308	548,308	5,207	21,322	65.8	1,470,986	678,596	99	1	15	13.0
St. Louis Southw. Lines	1959	1,554	353,687	353,687	4,418	16,205	69.9	1,056,392	472,222	50	..	1	2.0
	1958	1,554	304,568	304,598	1,609	13,581	67.7	881,768	394,163	53	..	..	..
Texas & New Orleans	1959	4,148	651,025	651,025	38	29,089	65.2	2,070,843	948,143	138	..	3	2.1
	1958	4,271	598,351	598,351	630	26,184	62.2	1,875,891	813,168	136	..	4	2.9
Texas & Pacific	1959	1,822	291,663	291,663	2,726	13,554	62.4	1,001,146	385,776	37	..	2	5.1
	1958	1,822	238,277	238,277	2,014	12,084	60.9	883,498	331,442	39	..	2	4.9

For the Month of June 1959 Compared with June 1958

Region	Road	Year	Freight cars on line: Home	Foreign	Total	Per Cent B.O.	G.t.m.per train-hr. exc.locos and tenders	G.t.m.per train-mi. excl.locos and tenders	Net ton-mi. per train-mile	Net ton-mi. per l'd car-mile	Net ton-mi. per car-day	Cars-miles per car-day	Net daily ton-mi. per road-mo.	Train-miles per train-hour	Miles per loco. per day
New Eng. Region	Boston & Maine	1959	1,991	8,027	10,018	3.3	40,650	2,573	1,031	28.1	738	42.6	4,726	15.8	77.5
		1958	3,139	6,246	9,385	3.8	40,317	2,564	988	27.4	726	44.4	4,504	15.8	91.8
	N. Y., N. H. & Hartfd	1959	2,880	15,087	17,967	6.1	41,817	2,742	1,147	27.8	565	31.3	5,496	15.2	136.0
		1958	3,793	11,602	15,395	4.9	44,534	2,758	1,085	26.5	580	35.5	4,951	16.1	115.5
Great Lakes Region	Delaware & Hudson	1959	2,949	4,998	7,947	7.5	63,541	3,487	1,777	35.7	1,140	47.9	11,949	18.3	138.9
		1958	6,778	4,715	11,493	6.6	61,978	3,494	1,667	34.4	667	31.6	10,507	17.8	130.3
	Del., Lack. & Western	1959	5,477	9,238	14,715	10.6	54,671	3,204	1,363	29.5	681	35.3	10,700	17.4	145.5
		1958	7,050	7,668	14,718	7.5	52,038	3,011	1,234	28.1	624	34.9	9,772	17.6	140.4
	Erie	1959	9,934	16,017	25,951	6.6	71,383	3,470	1,355	26.0	956	56.6	11,369	20.8	122.4
		1958	12,605	12,824	25,429	6.0	71,305	3,593	1,372	24.4	831	51.3	9,678	20.0	104.8
	Grand Trunk Western	1959	5,194	8,284	13,478	7.1	51,477	2,337	898	28.0	490	30.0	6,845	22.1	102.7
		1958	6,710	6,821	13,531	5.7	54,157	2,437	936	27.6	450	27.4	6,206	22.3	91.2
	Lehigh Valley	1959	5,409	8,411	13,820	9.4	64,680	3,049	1,403	31.3	623	29.8	7,739	21.4	209.8
		1958	8,589	7,844	16,433	10.1	64,486	3,053	1,384	31.5	531	26.2	7,677	21.3	209.0
	New York Central	1959	57,310	74,973	132,283	7.1	58,470	3,398	1,462	33.8	725	36.7	9,377	17.4	170.4
		1958	80,072	63,882	143,954	7.4	55,516	3,115	1,337	33.2	585	32.1	8,095	18.0	158.6
	New York, Chic. & St. L.	1959	9,029	15,525	24,554	12.3	59,460	3,396	1,517	32.5	1,242	59.3	13,899	17.8	163.7
		1958	12,452	10,184	22,636	12.7	60,470	3,288	1,368	30.1	1,058	57.3	11,109	18.6	129.1
	Pitts. & Lake Erie	1959	4,021	7,595	11,616	6.5	65,812	4,282	2,141	46.0	360	11.8	19,016	15.4	132.2
		1958	9,312	2,831	12,143	7.4	62,712	3,741	2,298	56.8	310	8.8	17,939	16.8	97.1
	Wabash	1959	9,563	7,181	16,744	8.2	73,838	3,028	1,198	27.7	1,156	66.9	8,261	24.5	154.7
		1958	10,788	8,683	19,471	5.8	64,684	2,973	1,146	26.7	846	51.0	6,920	21.8	131.6
Eastern Region	Baltimore & Ohio	1959	56,383	30,307	86,690	18.4	56,580	3,672	1,819	39.8	877	36.4	13,621	15.7	114.6
		1958	66,301	38,536	104,837	17.9	56,491	3,547	1,697	35.6	653	30.2	11,640	16.2	88.3
	Bessemer & Lake Erie	1959	4,264	1,435	5,699	8.7	101,841	6,227	4,043	75.5	1,460	31.2	43,266	17.0	169.0
		1958	5,987	861	6,848	13.3	88,385	5,581	3,697	82.0	597	12.0	22,545	16.8	116.6
	Central RR Co. of New Jersey	1959	3,522	11,552	15,074	14.4	42,140	3,064	1,648	42.0	418	15.4	10,194	14.4	88.6
		1958	4,447	9,918	14,365	13.5	43,402	3,135	1,607	39.4	382	15.1	8,652	14.5	79.1
	Chicago & Eastern Ill	1959	2,734	3,429	6,163	19.3	67,428	3,865	1,962	39.4	1,206	48.1	8,297	17.6	125.4
		1958	3,169	2,913	6,082	13.2	55,984	2,910	1,412	37.1	1,000	43.3	6,856	19.4	147.8
	Elgin, Joliet & Eastern	1959	8,219	8,452	16,671	4.3	22,301	3,094	1,665	44.9	218	7.9	17,842	7.5	72.4
		1958	7,938	4,450	12,388	6.2	22,502	2,640	1,411	43.5	215	8.0	11,274	8.9	63.1
	Pennsylvania System	1959	117,822	80,945	198,767	17.8	56,234	3,362	1,618	36.4	729	31.1	14,634	17.3	139.8
		1958	130,152	65,956	196,108	15.3	58,611	3,377	1,580	35.7	648	29.4	12,770	17.8	117.9
	Reading	1959	14,592	18,452	33,044	19.6	49,683	3,189	1,722	45.9	523	18.3	13,278	15.6	74.0
		1958	18,590	14,507	33,097	16.0	52,154	3,345	1,705	44.5	443	17.4	11,584	15.6	59.5
	Western Maryland	1959	6,247	3,380	9,627	5.1	58,380	3,923	2,247	50.6	1,151	35.2	12,897	15.2	162.4
		1958	7,708	2,858	10,566	4.7	51,224	3,578	1,996	49.7	798	27.0	10,528	14.7	121.2
Pocahontas Region	Chesapeake & Ohio	1959	57,357	33,967	91,324	6.5	79,464	4,372	2,459	50.1	1,056	37.1	18,697	18.3	67.6
		1958	69,154	28,564	97,718	3.6	82,232	4,314	2,433	50.5	927	32.8	17,995	19.2	66.4
	Norfolk & Western	1959	36,173	8,551	44,724	1.5	96,553	5,343	2,962	54.6	1,315	41.6	27,197	18.4	128.7
		1958	45,158	7,393	52,551	4.3	91,635	5,206	2,859	53.3	1,013	33.9	26,349	18.1	101.7
	Rich., Fred. & Potomac	1959	103	961	1,064	3.8	90,073	4,044	1,635	26.2	1,895	108.2	18,850	22.3	90.7
		1958	150	1,133	1,283	3.0	93,111	4,245	1,487	23.3	1,743	126.5	19,012	22.0	99.4
	Virginian	1959	11,881	1,235	13,116	2.1	74,005	5,067	2,893	54.6	1,026	33.8	21,034	14.9	68.1
		1958	13,335	1,696	15,031	3.8	76,315	5,096	2,863	54.9	877	30.0	21,861	15.3	69.2
Southern Region	Atlantic Coast Line	1959	15,596	18,462	34,058	3.3	47,264	2,824	1,278	34.8	734	36.3	4,915	16.8	195.2
		1958	23,551	13,059	36,610	3.9	46,043	2,526	1,044	31.2	617	35.8	4,367	18.3	195.2
	Central of Georgia	1959	3,243	6,610	9,853	2.7	51,296	2,945	1,440	37.4	975	40.4	5,334	17.5	197.4
		1958	4,675	3,748	8,423	4.7	50,921	2,815	1,266	35.2	900	41.5	4,456	18.1	192.1
	Florida East Coast	1959	557	2,747	3,304	.5	43,538	2,470	916	30.1	721	44.7	4,739	17.6	60.4
		1958	828	2,739	3,567	1.2	36,534	2,235	851	30.3	718	43.6	5,295	16.5	65.5
	Gulf, Mobile & Ohio	1959	6,094	10,471	16,565	5.3	72,678	3,847	1,849	34.0	936	41.0	5,810	18.9	102.0
		1958	7,752	9,864	17,616	7.2	71,962	3,669	1,688	32.8	816	39.0	5,166	19.6	98.9
	Illinois Central	1959	24,670	23,396	48,066	4.5	59,899	3,267	1,533	34.4	1,062	49.2	7,715	18.5	96.2
		1958	28,746	19,774	48,520	3.3	57,925	3,280	1,501	33.8	963	46.8	7,130	17.8	95.4
	Louisville & Nashville	1959	33,100	17,062	50,162	8.2	53,444	3,099	1,553	38.8	872	36.3	7,930	17.3	195.8
		1958	37,552	13,895	51,447	7.4	52,337	3,091	1,491	38.0	768	34.9	7,385	17.0	201.1
	Seaboard Air Line	1959	16,785	12,874	29,659	3.3	56,048	3,027	1,374	35.4	892	42.5	6,445	18.8	170.1
		1958	18,402	10,133	28,535	3.2	54,038	2,790	1,165	32.4	826	44.6	5,835	19.8	161.7
	Southern	1959	18,414	29,026	47,440	4.4	58,160	3,263	1,537	32.8	896	42.2	6,808	17.8	155.1
		1958	22,520	26,494	49,014	4.3	52,996	3,118	1,399	31.7	740	38.2	5,840	17.0	152.6
Northwestern Region	Chicago & North Western	1959	21,172	25,892	47,064	5.5	53,795	2,886	1,199	30.0	756	41.0	3,834	18.7	181.5
		1958	23,875	22,693	46,568	5.2	51,394	2,826	1,136	30.0	617	33.3	3,118	18.2	158.4
	Chicago Great Western	1959	2,009	4,032	6,041	3.7	68,358	3,664	1,719	33.1	1,237	56.0	5,377	18.7	181.0
		1958	2,130	3,421	5,551	4.0	67,521	3,615	1,672	32.8	1,165	54.1	4,891	18.8	161.9
	Chic., Milw., St. P. & Pac.	1959	27,045	26,045	53,090	4.1	65,466	3,351	1,533	32.0	821	39.4	4,153	19.6	98.7
		1958	37,601	21,645	59,246	5.3	61,834	3,111	1,387	31.3	635	32.0	3,564	19.9	100.7
	Duluth, Missabe & Iron Range	1959	11,759	678	12,437	3.2	113,855	6,614	3,928	66.2	1,343	39.8	30,299	18.6	61.8
		1958	13,718	751	14,469	5.4	102,307	6,399	3,963	68.9	759	21.5	20,048	17.1	34.8
	Great Northern	1959	22,796	18,766	41,562	3.6	64,675	3,462	1,680	37.3	1,265	53.9	6,425	19.0	126.2
		1958	25,884	16,033	41,917	3.8	62,536	3,268	1,551	35.9	1,069	47.4	5,446	19.4	120.8
	Minneap., St. P. & S. St. Marie	1959	6,673	6,935	13,608	5.2	51,747	2,640	1,235	32.4	1,101	51.4	3,566	19.8	134.1
		1958	7,145	6,171	13,316	5.7	47,441	2,232	1,056	31.8	913	43.0	3,022	21.3	137.6
	Northern Pacific	1959	17,440	14,911	32,351	3.6	62,801	3,029	1,375	31.7	1,066	51.3	5,440	20.8	114.6
		1958	20,046	12,950	32,996	4.8	63,402	3,056	1,361	31.4	935	46.5	4,792	20.8	111.5
	Spokane, Portland & Seattle	1959	1,275	3,788	5,063	3.7	39,476	2,584	1,210	27.8	1,116	54.2	6,096	15.3	98.0
		1958	1,655	4,096	5,751	3.3	43,040	2,935	1,403	31.9	1,112	47.7	6,488	14.7	87.8
Central Western Region	Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.)	1959	53,664	44,570	98,234	3.6	72,130	3,093	1,173	27.7	1,220	70.9	8,901	23.4	180.0
		1958	61,123	37,459	98,582	6.0	76,100	3,466	1,325	27.5	1,049	60.6	7,708	22.0	129.7
	Chic., Burl. & Quincy	1959	22,063	19,654	41,717	3.6	62,971	2,938	1,300	30.8	1,054	52.8	5,199	21.5	168.4
		1958	23,278	18,361	41,639	3.8	62,943	2,943	1,285	29.7	949	49.0	4,478	21.4	147.5
	Chic., Rock I. & Pac.	1959	14,446	28,875	43,321	3.6	57,153	2,850	1,194	30.2	1,071	56.4	5,886	20.1	204.3
		1958	17,082	29,043	46,125	3.8	58,915	2,973	1,238	31.0	923	49.1	5,276	19.9	187.8
	Denver & R. G. Wn.	1959	8,496	5,688	14,184	5.9	67,169	3,268	1,599	34.5	1,132	45.3	7,407	20.6	124.7
		1958	8,700	5,694	14,394	6.2	72,798	3,567	1,763	33.5	1,035	41.5	6,775	20.5	103.5
	Southern Pacific	1959	32,154	48,275	80,429	2.5	68,253	3,355	1,376	28.8	1,319	70.7	13,287	20.6	127.3
		1958	33,690	39,403	73,093	2.0	68,697	3,339	1,316	27.8	1,258	73.1	11,301	20.8	109.5
	Union Pacific	1959	31,300	33,302	64,602	2.0	87,291	3,139	1,341	28.5	1,504	78.9	9,752	28.0	168.3
		1958	33,779	30,626	64,405	2.6	87,742	3,327	1,403	28.3	1,350	72.5	8,741	26.5	136.4
	Western Pacific	1959	2,585	2,928	5,513	2.9	72,543	2,615	1,115	28.3	1,815	95.5	8,719	28.0	236.6
		1958	2,723	3,181	5,904	2.3	79,346	3,023	1,371	29.8	1,737	82.6	8,473	26.4	185.7
Southwestern Region	Kansas City Southern	1959	2,331	5,859	8,190	4.6	99,322	4,978	2,344	36.0	1,232	52.7	11,065	20.1	222.3
		1958	2,587	4,311	6,898	5.1	91,294	4,462	2,021	32.7	995	45.7	8,105	20.5	175.3
	Louisiana & Arkansas	1959	1,954	3,398	5,352	6.4	69,905	3,627	1,758	37.5	944	37.9	6,572	19.3	174.7
		1958	2,946	2,679	5,625	6.3	75,017	3,757	1,737	36.7	690	30.3	5,180	20.0	161.8
	Mo.-Kans.-Texas Lines	1959	4,681	9,230	13,911	7.3	61,472	4,009	1,843	33.7	990	43.7	4,541	15.4	123.7
		1948	5,963	10,655	16,618	7.2	55,741	3,464	1,611	34.0	834	40.1	4,155	16.2	109.3
	Missouri Pacific	1959	22,740	28,050	50,790	7.4	66,368	3,346	1,525	32.7	1,187	56.6	6,325	19.9	180.2
		1958	25,575	22,392	47,967	7.1	64,203	3,246	1,453	32.5	1,077	52.7	5,412	19.9	167.6
	St. Louis-San Francisco	1959	10,802	11,030	21,822	1.9	55,032	2,787	1,347	33.1	1,172	51.2	5,876	19.9	197.8
		1958	12,553	9,820	22,373	1.8	51,401	2,705	1,248	31.8	992	47.4	4,963	19.2	188.6
	St. Louis Southw. Lines	1959	1,954	5,080	7,034	1.7	68,014	2,996	1,339	29.1	2,218	108.9	10,129	22.8	251.2
		1958	2,794	4,186	6,980	1.4	67,917	2,899	1,296	29.0	1,845	93.9	8,455	23.5	199.6
	Texas & New Orleans	1959	6,179	15,486	21,665	1.6	73,328	3,197	1,464	32.6	1,465	68.9	7,619	23.1	164.4
		1958	7,121	15,686	22,807	1.6	69,211	3,151	1,366	31.1	1,187	61.5	6,346	22.1	150.0
	Texas & Pacific	1959	2,808	6,048	8,856	3.6	79,703	3,441	1,326	28.5	1,414	79.6	7,058	23.2	268.5
		1958	3,779	6,088	9,867	3.6	80,194	3,721	1,396	27.4	1.137	68.0	6,064	21.6	206.8

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

Contract Rates Aid Shippers

The new trend toward contract rates holds great potential advantages for both railroads and shippers, Robert W. Minor, New York Central vice president—law, told the Traffic and Transportation Group of the National Petroleum Association in Atlantic City, N. J.

Mr. Minor, a former member of the Interstate Commerce Commission, recalled that last year Commissioner Howard G. Freas told a Senate subcommittee that railroads were "free to initiate" proposals on contract or agreed charges.

"The implicit invitation in his testimony could not long be ignored," said Mr. Minor. "Nor was it. The first to accept was the Soo Line. By tariff publications scheduled to become effective April 10, 1959, the Soo proposed to establish a guaranteed rate on pipe and tubing from Sault Ste. Marie, Ont., to Chicago, restricted to apply only when 90% of the shipper's tonnage destined to or through Chicago moved by rail. The ICC suspended the tariff. Hearings were held in June and briefs submitted last week.

"Now the New York Central has proposed a contract charge tariff to apply to the movement of carpeting and rugs from Amsterdam, N. Y., to Chicago. The Central tariff includes a form of contract which must be executed by the shipper as a condition precedent to the application of the contract charge rates. Essentially, the shipper must agree to move 80% of its traffic via the lines of the participating carriers for a period of one year. In the event of shipper default, the tariff provides a higher non-contract charge which would then become applicable to the shipments. The Soo Line and Central tariffs thus differ somewhat in form, yet neither has adopted the form of agreed charge now successfully employed in Canada, which provides a specific penalty for a breach of contract on the part of the shippers . . .

"Finally, in a case decided on June 23 of this year, the New York Public Service Commission approved a guaranteed rate on crushed stone, published by the Lackawanna, which required a shipper making use of the rates to ship all of its tonnage via that carrier. The Lackawanna tariff is similar in effect to that of the Soo Line. Significantly, the N. Y. Commission cited the so-called 'volume rate' decisions of the ICC in supporting its approval of this guaranteed rate."

The principal benefit to a shipper under such a rate, Mr. Minor said, is a "guaranteed continuing reduction in immediate transportation cost over a specified period of time.

"But there are concomitant benefits," he added, "which will inevitably flow from such close working arrangements. Able to control and thus insure maximum use of equipment, the rail carrier may well be able to afford investment in specialized facilities, designed specifically to afford better service to the participating shipper. The shipper may reasonably expect a more dependable car supply. And, with techniques of inventory control increasingly dominant in production management, an arrangement of this nature with the carrier will tend to integrate the transportation factor into the production line. Cost savings in inventory and materials handling, resulting from dependable, guaranteed, tailored rail service, could soon overshadow the savings in immediate transportation cost."

Advantages to Carriers

The advantages of contract rates to the carriers are equally attractive, said Mr. Minor.

"The first, and most obvious, is assured volume . . . Volume is the key to the rail carrier's exploitation of its inherent advantage. Up to plant capacity, which we are far from approaching, increased volume permits a rail carrier to reduce its unit costs. This reduction, in turn, flows to the benefit of all users of the rail carrier. The agreed charge should be an effective tool for increasing traffic volume.

"Secondly, the carrier, for the first time, will be able to rely on consistent use of his equipment. I have already suggested that this will greatly encourage the carrier's investment in special equipment. But this encouragement would not be limited to investment in equipment. Off-track facilities, support yards, and other investments, theretofore deemed marginal, could suddenly become economically feasible under a guaranteed volume of traffic. In addition, the ability to forecast, much more specifically than ever before, the demands for car and power supply will effect real economies in operation, again to the benefit of all rail users," Mr. Minor said.

TAKE
THIS LINE
OF ACTION...
DEUTSCHE
DB
BUNDESBAHN
To all Europe route your freight via German Federal Railroad
• Superb handling • Ultra-modern equipment
• Fast connections—add up to the SPEED and SERVICE
so essential in this highly competitive age.
Ship sure—ship safe—ship via German Federal Railroad.
See your Freight Forwarder or contact:
GERMAN FEDERAL RAILROAD
GENERAL AGENCY FOR NORTH AMERICA • JOACHIM WENZEL,
11 W. 42ND STREET, NEW YORK 36, N. Y. • GENERAL REPRESENTATIVE
PHONE LONGACRE 5-7545-6-7-8

MARKET OUTLOOK *at a glance*

Carloadings Rise 20.3% Above Previous Week's

Loadings of revenue freight in the week ended Sept. 19 totaled 578,240 cars, the Association of American Railroads announced on Sept. 24. This was an increase of 97,593 cars, or 20.3%, compared with the previous week; a decrease of 89,520 cars, or 13.4%, compared with the corresponding week last year; and a decrease of 146,694 cars, or 20.2%, compared with the equivalent 1957 week.

Loadings of revenue freight for the week ended Sept. 12 totaled 480,647 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, Sept. 12

District	1959	1958	1957
Eastern	69,895	93,355	111,612
Allegheny	70,945	112,963	142,899
Pocahontas	39,704	57,136	66,040
Southern	98,135	116,348	119,935
Northwestern	57,721	108,096	122,116
Central Western	99,213	128,926	123,962
Southwestern	45,034	49,399	54,583
Total Western Districts	201,968	286,421	300,661
Total All Roads	480,647	666,223	741,147
Commodities:			
Grain and grain products	44,375	55,699	46,537
Livestock	6,978	7,977	8,934
Coal	88,087	117,838	143,270
Coke	2,815	7,152	10,381
Forest Products	35,774	40,712	39,377
Ore	8,344	57,297	83,095
Merchandise l.c.l.	35,749	53,540	56,242
Miscellaneous	258,525	326,008	353,311
Sept. 12	480,647	666,223	741,147
Sept. 5	544,089	563,725	646,117
Aug. 29	548,820	646,226	745,620
Aug. 22	542,561	634,231	759,240
Aug. 15	543,844	626,314	650,640
Cumulative total, 37 weeks	22,139,492	20,824,937	25,672,038

PIGGYBACK CARLOADINGS.—U. S. piggyback loadings for the week ended Sept. 12 totaled 7,313 cars, compared with 5,950 for the corresponding 1958 week. Loadings for 1959 up to Sept. 12 totaled 287,116 cars, compared with 182,241 for the corresponding period of 1958.

IN CANADA.—Carloadings for the seven-day period ended Sept. 7 totaled 67,569 cars, compared with 104,871 cars for the previous ten-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
Sept. 7, 1959	67,569	24,485
Sept. 7, 1958	65,124	23,312
Cumulative Totals:		
Sept. 7, 1959	2,592,548	962,758
Sept. 7, 1958	2,548,622	969,823

Maintenance Expenditures

► *Up 7.1% in July.*—Expenditures by Class I roads for maintenance of equipment, way and structure in July 1959 were up about $17.3 million compared to the same month in 1958, according to report of ICC Bureau of Transport Economics and Statistics summarized below:

	July 1959	July 1958	%Change
Maintenance of Way & Structures	$110,178,575	$106,005,966	+3.9
Maintenance of Equipment	151,954,250	138,821,714	+9.5
Totals	262,132,825	244,827,680	+7.1

New Equipment

► *Pennsylvania.*—will acquire 66 4400-hp rectifier type electric locomotives from General Electric under a long-term lease arrangement. Total value will be approximately $32 million. The new road-switcher-type units will replace 90 electric locomotives, which have been in freight service for the past 25 years. Deliveries will be made over a three-year period.

New Facilities

► *Canadian Pacific.*—Received approval from the Board of Transport Commissioners for construction of a $17,000,000 terminal freight yard at Agincourt, about 15 miles northeast of Toronto. The 400-acre facility will have 123 tracks with a capacity of 10,000 cars. Most of the work is scheduled to be completed in 1960.

► *Quanah, Acme & Pacific.*—Has begun construction of TOFC facilities at Floydada, Tex. Project will cost about $55,000.

Orders and Deliveries

► *Deliveries Increase.*—Orders were placed in August for 1,753 freight cars, compared with 4,159 in July. August 1958 orders totaled 1,773. Deliveries in August totaled 4,890, compared with 4,273 in July, and 2,151 in August 1958. The backlog of cars on order and undelivered as of Sept. 1, 1959, was 37,172, compared with 40,309 on Aug. 1 and 25,611 on Sept. 1, 1958.

Type	Ordered August 1959	Delivered August 1959	Undelivered Sept. 1, 1959
Box—Plain	510	2,180	10,811
Box—Auto	0	0	500
Flat	676	322	2,529
Gondola	0	189	4,308
Hopper	400	1,687	13,670
Cov. Hopper	62	256	842
Refrigerator	0	5	3,385
Stock	0	0	0
Tank	105	193	836
Caboose	0	10	221
Other	0	48	70
Total	1,753	4,890	37,172
Car Builders	1,753	3,629	17,516
Railroad Shops	0	1,261	19,656

New Transport Study: 'Slow—but Thorough'

The transportation study of the Senate Committee on Interstate and Foreign Commerce is headed by a director who is determined to do a thorough job, even if it's not a fast one.

The director is Maj. Gen. John P. Doyle, former chief of transportation for the Air Force. His approach to the assignment has the unqualified support of the committee's chairman, Senator Magnuson of Washington, who has said: "None of us thinks this will be a short or an easy job, but we intend to push it through to a conclusion."

All of which indicates that the Senate will be asked to set back the Jan. 31, 1960, deadline date now fixed for completion of the study. And that recommendations are not likely to be ready for consideration by Congress until late in the next session—or perhaps until the 1961 session, which will bring a new Congress to Washington.

The inquiry has been a long time getting under way. It is designed to consider problems left untouched by the Transportation Act of 1958, and was first called for by Senate Resolution 303, adopted in 1958 by the previous Congress. The authority carried in that resolution was scheduled to expire last Jan. 31, but was continued by Senate Resolution 29, with its Jan. 31, 1960, deadline.

Staff Members Named

It was not until July that General Doyle was selected as the staff director. His first public discussion of the assignment is scheduled for this week, when he will address a luncheon meeting of the National Defense Transportation Association's Washington Chapter. He is just now completing the organization of his staff. They are:

Robert Ables, from the staff of the Federal Aviation Agency.

Robert Burk and Joseph V. Gallagher, attorneys from the Department of Justice.

Marvin L. Fair, professor of transportation at American University.

Jesse J. Friedman, economic consultant.

Richard Heilprin, from the staff of the Interstate Commerce Commission.

Walter Kurylo, from the staff of the Bureau of Public Roads.

Robert D. L'Heureux, attorney and former counsel for the committee.

Albert Luckey, from the staff of the committee's Surface Transportation subcommittee.

Roland Oellette, research librarian from the Library of Congress.

Ralph Rechel, transportation economist.

S. Res. 29's specifications for the study call for inquiries into these matters:

- The need for regulation of transportation under present-day conditions and, if there is a need for regulation, the type and character of that regulation.
- The area of federal policy dealing with government assistance provided the various forms of transportation and the desirability of a system of user charges to be assessed against those using such facilities.
- The subject of ownership of one form of transportation by another.
- Federal policy on the subject of consolidation and mergers in the transportation industry.
- Policy considerations for the kind and amount of railroad passenger service necessary to serve the public and provide for the national defense.
- The problems arising from action by the Interstate Commerce Commission in permitting the charge of more for a short than a long transportation haul over the same line in the same direction.

Senate Resolution 151, adopted toward the end of the recent session, added another specific assignment—an investigation of "the adequacy of transportation service to and from rural communities in the United States, and the effects of the curtailment of such service in recent years upon the economy of such communities and of the nation as a whole and upon the national defense and security."

Other inquiries may also be made under S.Res. 29's omnibus clause, which is a general authorization for investigation of "additional matters of federal regulation (and exemption therefrom) and federal promotional policy in regard to the various forms of transportation."

General Doyle is reluctant at this stage to say much about what he and his staff will accomplish. What he does say indicates that he will adopt a broad approach and strive for realistic conclusions and recommendations. He recognizes, of course, that the specific assignments must be carried out, but he thinks this can be done in broad inquiries—as he puts it, for example, "in studies in the general area of public aid," and "studies in the general field of coordination and combination."

In other words, the general feels that S.Res.29 is principally a "charter for an overall look at the national transportation situation," that the basic question it raises is: "What can be done to develop the best possible transportation capability to serve the country?" He also feels that the time has come for real transportation planning at the national level—because most transport legislation and administrative action of the past have been designed to accomplish specific objectives, without regard to effects in other areas.

Advisory Council to Help

General Doyle expects to rely heavily upon his advisory council for information and advice. This council is a 26-member group, representing carriers, shippers, labor, and others interested in transport problems. Its chairman is George P. Baker, professor of transportation at Harvard's Graduate School of Business Administration, and its railroad members are William T. Faricy, former president of the Association of American Railroads and O. Arthur Kirkman, executive vice-president and general manager of the High Point, Thomasville & Denton, representing the American Short Line Railroad Association.

The Railway Express Agency is represented by its president, William B. Johnson, and the National Industrial Traffic League by a member of its executive committee, C. H. Beard, general traffic manager for Union Carbide Corp. Railroad labor's representative is George E. Leighty, chairman of the Railway Labor Executives' Association.

General Doyle looks upon this ad-

(Continued on page 54)

MAJ. GEN. JOHN P. DOYLE

Meet The Folks Who Sell Our Service

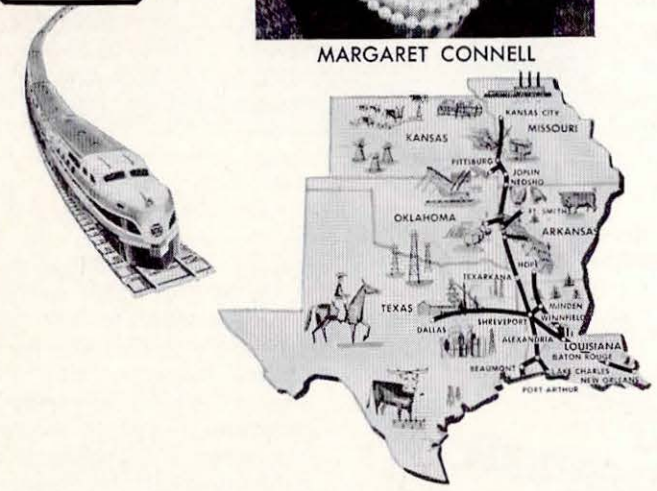
(One of a series)

NELS R. HOWE

EDWARD G. HALM

MARGARET CONNELL

KANSAS CITY SOUTHERN Lines



OUR PORTLAND AGENCY
417 Terminal Sales Building

OUR PORTLAND AGENCY serves shippers in all of Oregon, Southern Idaho, part of California and southwestern Washington.

The forests of the region supply the principal products. Oregon, which leads all states in lumber production, is said to have enough standing sawtimber to replace every dwelling in the United States. Idaho contributes its famous potatoes. Other important products are superphosphate, paper and paper manufactures, seeds, fruits and vegetables. Incoming commodities include baskets, alumina and miscellaneous needs.

Born in Norway, Nels Howe, who heads our Portland agency, came to this richly-endowed region as a boy. As a young man, he began his railroad career—a career that has engrossed him completely and made countless friends for Kansas City Southern Lines.

It is to these friends that Nels, his staff and all of us say, "Thank you sincerely!"

J. W. SCOTT
Vice President—Traffic
Kansas City 5, Missouri

NELS R. HOWE began service as steno-clerk in our Seattle Traffic office in 1930, after 12 years with the Great Northern. Appointed traveling freight agent 1936; commercial agent 1942; general agent 1944. General agent, Portland, since 1952. Ardent worker in church, community chest and transportation clubs.

EDWARD G. HALM began railroading in his late teens—first with the Grand Trunk, interrupted by 5 years of army service (1st Lieutenant Anti-Aircraft), followed by 3 years with New Haven. With KCS Lines since 1952. Traveling freight agent since 1953.

MARGARET CONNELL learned about rates and routings while employed in the lumber industry. With KCS Lines as steno-clerk since 1957. Active member National Secretaries Association; served as vice president of the Lumber Jills, composed of women in the lumber industry.

Are Executives Paid Enough?

There is one place in railroading, anyhow, where the old-fashioned free market still rules—where prices are determined by the interplay of the forces of supply and demand. That place is in the compensation of top executives. No union or regulatory body prescribes such rates of pay—forcing them up to arbitrary levels. If an executive gets $150,000 or $100,000 or $50,000 a year, the only possible reason is that the directors believe that is the figure they must pay—in order to attract the kind of talent these jobs require.

The difference between the cost of a superior executive and a mediocre one is usually the most remunerative expenditure a company can make. The superior performer may cost $25,000 or $50,000 more than the one of limited capacity—but results will show he's worth it.

•

How does the compensation of railroad executives compare with that of executives of other large industries? Are railroad directorates making these positions as attractive money-wise as they should, to acquire and hold the kind of ability railroads need for superior performance? The National Industrial Conference Board has just issued a report on this subject. It surveys the practice of 644 manufacturing and 306 non-manufacturing companies (1957 figures).

In the manufacturing industry, there were 39 top executives whose total compensation was over $200,000. No railroad executive was paid so much. There were 60 manufacturing companies (or almost 10% of the total) whose chief executives received more than $150,000. There was only one railroad (out of a total of 42) that paid more than $150,000.

The *modal average* of the top railroad salaries was in the $75-$100 thousand range; and the modal average in the manufacturing industry also fell into that category. In other words, it could be fairly said that "most railroad executives receive salaries in the same general range as those in the manufacturing industry—but the highest paid leaders in the manufacturing industry get much more than the highest paid railroaders."

The *median average* salary of top executives was $87,000 in manufacturing, $86,000 in retail trade, $80,000 in finance (other than banking and insurance) and $76,000 in railroading. In mining, the median average of top salaries was $72,000; in utilities and insurance, $65,000; and in airlines and other (non-railroad) forms of transportation, $60,000.

Considering the size of the companies, the number of their employees, their volume of sales—there is certainly no evidence here to sustain the slightest suspicion that railroad directorates are paying any more than they have to pay—to get the kind of managers needed by a business as big and complex as the average railroad is.

Certainly there is nothing about the "higher bracket" compensation on the railroads which parallels the situation in the "lower brackets"—where, in many communities (particularly semi-rural ones), railroad employees are receiving wages 50% or more higher than employees holding jobs of similar skills in local businesses.

How does railroad pay for the second and third highest-paid executives stack up with the practice of other industries? The median average compensation of the "second man" on railroads was $50,000 (compared to $64,000 in retail trade, $60,000 in manufacturing, $59,000 in finance other than banks and insurance, and $53,000 in mining.) The median in the utilities, insurance, airlines and other (non-railroad) transportation was in the $45-47 thousand range.

The "second man" on the railroads received, on the median average, 35% less compensation than his chief. This was the widest percentage difference between the top and next-to-top compensation of any of the industries surveyed.

•

TELL THE DIRECTORS: The evidence in this report on the competitive adequacy of railroad executive compensation is pretty conclusive. It shows that directors are certainly not overpaying the top positions, while they may possibly be underpaying the No. 2 spot. The second man is, more often than not, the most likely candidate for the top position—and, if his salary is too far below that at the top rung of the ladder, maybe he won't be around when time comes for him to step up. Directors have no more important duty than that of attracting and holding competent managers, and that duty cannot be well performed without knowing what adequately attractive pay has to be.

Meet The Folks Who Sell Our Service

(One of a series)

NELS R. HOWE

EDWARD G. HALM

MARGARET CONNELL

OUR PORTLAND AGENCY
417 Terminal Sales Building

OUR PORTLAND AGENCY serves shippers in all of Oregon, Southern Idaho, part of California and southwestern Washington.

The forests of the region supply the principal products. Oregon, which leads all states in lumber production, is said to have enough standing sawtimber to replace every dwelling in the United States. Idaho contributes its famous potatoes. Other important products are superphosphate, paper and paper manufactures, seeds, fruits and vegetables. Incoming commodities include baskets, alumina and miscellaneous needs.

Born in Norway, Nels Howe, who heads our Portland agency, came to this richly-endowed region as a boy. As a young man, he began his railroad career—a career that has engrossed him completely and made countless friends for Kansas City Southern Lines.

It is to these friends that Nels, his staff and all of us say, "Thank you sincerely!"

J. W. SCOTT
Vice President—Traffic
Kansas City 5, Missouri

NELS R. HOWE began service as steno-clerk in our Seattle Traffic office in 1930, after 12 years with the Great Northern. Appointed traveling freight agent 1936; commercial agent 1942; general agent 1944. General agent, Portland, since 1952. Ardent worker in church, community chest and transportation clubs.

EDWARD G. HALM began railroading in his late teens—first with the Grand Trunk, interrupted by 5 years of army service (1st Lieutenant Anti-Aircraft), followed by 3 years with New Haven. With KCS Lines since 1952. Traveling freight agent since 1953.

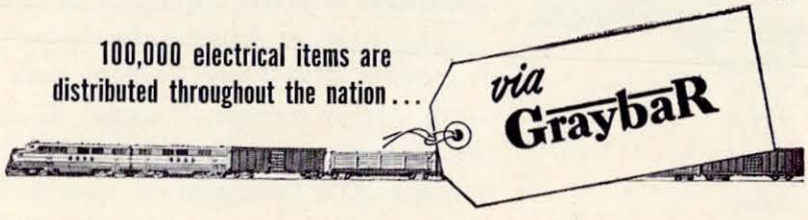
MARGARET CONNELL learned about rates and routings while employed in the lumber industry. With KCS Lines as steno-clerk since 1957. Active member National Secretaries Association; served as vice president of the Lumber Jills, composed of women in the lumber industry.

APRIL 6, 1872
NEW INVENTION MAKES EVERY MAN A TELEGRAPHER
NEW YORK, April 6—A simple telegraph instrument which automatically prints the dispatch being sent or received has been designed by Messrs. Foote and Randall of New York.
The advantages of a telegraph transmitting apparatus which can be operated by any person of average intelligence, after a few minutes instruction, is sufficiently obvious without further comment. Every man can thus be his own telegraph operator, and railroad conductors, locomotive-runners, clerks or office boys can quickly become expert in the use of the instrument.
In the transmitting apparatus as in the receiving apparatus, a train of wheels is employed

Even back in the days when the printing telegraph was news, Graybar was active in railroad communications. From 1869 to date, Graybar has always kept its stocks and services in tune with the newest developments in railroad communications. Wires and cables... to carrier telephone and telegraph equipment... sound systems of all types, each item in the long list of modern railroad requirements can be supplied through 120 conveniently located Graybar offices and warehouses.

To save paper work, to save time, and to get the experienced assistance of railroad electrical equipment specialists, make your next order read "Via Graybar". Graybar Electric Company, Executive Offices: Graybar Building, 420 Lexington Avenue, New York 17, N.Y.

541



OFFICES AND WAREHOUSES IN OVER 120 PRINCIPAL CITIES

TRANSPORT STUDY

(*Continued from page 52*)

visory-council set-up as an ideal arrangement for communication with interested parties. He says he could have no better sources of ideas than the council members. And he also points out that they are major sources of information and statistics. One by one, he has been asking the members what they consider the most important transportation problem—and their replies have been "interesting."

Committee Chairman Magnuson has explained that the advisory council was appointed "in order to make sure that this study reflects the thoughts and experience of leaders in the industry." He also said the committee wants all interested parties to know what it is doing, and "we want everybody coming to us through the front door."

The study is now in what General Doyle calls its first phase, which involves the gathering and analyzing of available information on matters to be covered. That means compiling a condensed record from records and reports made in the past.

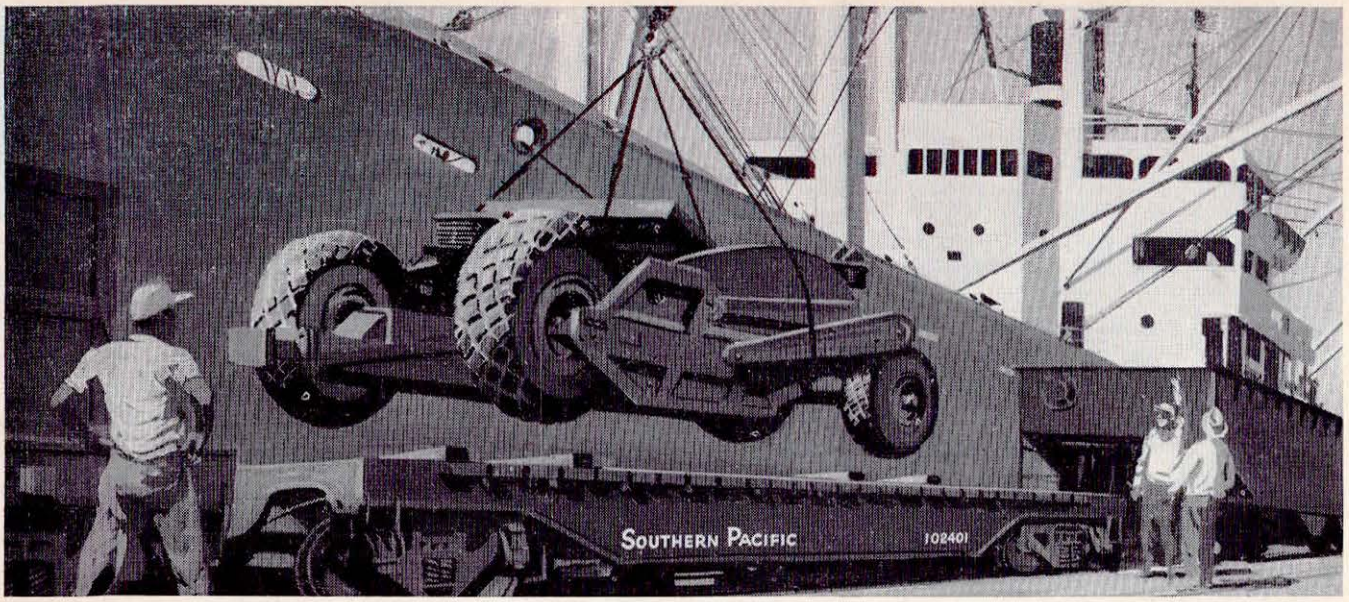
There have been several of these in the last 25 years.

Included are the studies and reports made by the Board of Investigation and Research created by the Transportation Act of 1940, the so-called Sawyer report, made by former Secretary of Commerce Charles Sawyer, and the so-called Cabinet Committee Report, made by President Eisenhower's Advisory Committee on Transport Policy and Organization. Also, there are the records of various hearings which Congressional committees have held on transport bills and investigations.

Gen. Doyle feels, too, that much worthwhile work on transport studies has been done at state and local-community levels—by government and other interested parties. He wants his staff to look over these studies, especially for what they may have to say about commutation and rural-service problems.

After the gathering and analyzing job has been done, the study will proceed to the gap-filling stage. General Doyle hopes thus to round out a record on which to base recommendations. He is not yet in a position to say whether the study will go to a third stage of public hearings before the committee — or to indicate when a staff report with recommendations for legislation might be made.

He won't make such predictions, preferring, as he put it, to "wait and talk about what has been accomplished."



OVERSEAS

S.P. doesn't own or operate any ships. But we play a surprisingly important part in U.S. trade with foreign countries. We go down to the sea in freight cars at 23 deep-water ports on the West Coast and Texas-Louisiana Gulf Coast and we serve 11 border-crossing ports on the U.S.-Mexico boundary. About 5 million tons of import and export freight a year move through efficient S.P. terminals at these ports and gateways.

OVERLAND

Whenever you take the *train*, on one of the scenic routes and famous streamliners of S.P., you wonder why you don't indulge oftener in this kind of travel therapy . . . relaxing hours in your homey Pullman room (or deep-cushion Chair Car seat) . . . polite, attentive service wherever you go on board for meals or refreshments . . . time to unwind, time to cogitate, time to write a letter, even time to *sleep*. See your S.P. "Doctor"—he's the ticket agent.

The West and Southwest served by Southern Pacific comprise one of the fastest growing, most productive areas in the U.S. Our job is to match this vitality with dynamic transportation. We hope our customers and neighbors feel that we are doing so.

Southern Pacific

serving the West and Southwest with

TRAINS • TRUCKS • PIGGYBACK • PIPELINES

You Ought To Know...

Will there be a railroad strike? And, if there is, what will be the consequences to the shipping public? Those two questions will be debated as the Great Lakes Region Rail Shippers Advisory Board takes a close look at the railway labor situation at a board meeting scheduled for Sept. 29-30 in Toledo, Ohio.

Tighter train-off rules will get further attention from the Senate Interstate Commerce Committee when Congress reconvenes in January, says Committee Chairman Magnuson. New Jersey Senator Case has charged that Congress this year "failed to meet its responsibilities" to railroad passengers, added: "We must right these wrongs next year."

Deferred payment of some mortgage bonds has been requested of the ICC by the Boston & Maine. The company told the Commission that it appeared unlikely that it would have sufficient cash to meet the maturities on the due dates (1960 and 1961). As an alternative, B&M proposes a new series of 6% first mortgage bonds to be issued to present holders of the maturing bonds.

Erie-Lackawanna merger won the overwhelming approval of stockholders of both roads last week. ICC hearings on the proposed unification will open Sept. 29 in Buffalo, N. Y.

The Pacific Northwest Advisory Board is considering changes in the form of its meetings. Object: To create greater interest by providing more opportunity for participation by both carriers and shippers. But, Board President J. G. Manning assured the group's Spokane meeting on Sept. 19, "there is no question of a confident future for the advisory boards."

William White, president of the Delaware & Hudson, has been elected a member of the board of directors of the Association of American Railroads to fill the unexpired term of Nickel Plate Chairman L. L. White, who is retiring as chief executive officer of his road.

J. M. Hood plans to retire next year from the presidency of the American Short Line Railroad Association. This became known at the annual meeting of the association in Washington last week, where the directors gave consideration to the matter of choosing a successor. Mr. Hood expects to retire after the next annual meeting, scheduled for October 1960 at Green Bay, Wisc., when he will have rounded out 25 years as president of ASLRA.

A sixth edition of the C&EI Freight Rate Streamliner—X 212—has been published. It simplifies application of the Ex Parte 212 increases. When the new issue is used with other C&EI short-cut tariff issues, the fully increased rate can be quickly and accurately determined without resorting to the five actual increase tariffs still in effect.

A 7.2% increase in carloadings is being forecast by the Ohio Valley Transportation Advisory Board for the fourth quarter, provided the steel strike ends by Oct. 1. Biggest percentage increase is expected in the manufactures and miscellaneous category. Overall, the board predicts loadings totaling 990,948 cars, compared with 924,512 actual loads in fourth quarter 1958.

A series of purchasing seminars designed to broaden the general purchasing knowledge of the road's P&S department personnel has been begun by Rock Island. Meetings will be held each Monday, will continue for more than a year. About 30 P&S department employees will participate directly. Another 30 men (on-line storekeepers) will participate through a "correspondence course"—mimeographed reports of the weekly seminar discussions. Harold A. Berry, manager, purchases and stores, instituted the seminar project.

Labor should be "the enemy of waste, not its protector" PRR Vice President James W. Oram told the American Management Association's Fall Personnel Conference last week. "Labor's essential objective is the creation of jobs which lead to higher pay and higher living standards," and when it "attacks management for seeking productivity," it is "its own worst enemy" Mr. Oram remarked in explaining the railroad industry's stand on featherbedding.

Hot box detection will be discussed at the Signal Section convention, Oct. 12-14 in Washington. H. T. Rainey, superintendent motive power and equipment, RF&P, will discuss the mechanical department's role in this field. J. I. Kirsch, system engineer, communications and signals, PRR, and J. G. Karlet, superintendent signals and communications, N&W, will present the signal department's role.

Preview runs of C&NW's "push-pull" trains are scheduled for Sept. 29 and 30, over the three divisions on which the road operates commuter service. The equipment, double-deck coaches, cab car and modified F-7—will go on display at North Western station in Chicago Wednesday afternoon, Sept. 30.

Piggyback is coming to Japan. Shinji Sogo, president of Japanese National Railways, says TOFC and container service will be inaugurated on JNR's new $479-million Tokyo-Osaka (Tokaido) line, now under construction. Object is to recapture traffic that is shifting, in increasing volume, from rail to highway.

Federal aid to Jersey commuters will be needed to supplement state efforts, N.J. Gov. Robert B. Meyner said last week, in stumping for all-out support for his proposal to use N.J. Turnpike surpluses to aid commuters. "I don't think the state is going to solve all of the problems of the passenger railroads," the governor said. "I think the Federal Government will eventually have to step in. They have done it with the airports and on behalf of the airlines."

Advertisers' Index

American Brake Shoe 15
Association of American Railroads 45
Atlantic Coast Line Railroad 11

Bethlehem Steel Company 3

Chicago Burlington & Quincy Railroad 19
Chicago Milwaukee, St. Paul & Pacific 24, 25
Chicago Railway Equipment Company ....Inside Back Cover
Classified Ads 57

Delware & Hudson Railroad Corp. 41

Erie Railroad Company 16
Erman-Howell Division, Luria Steel & Trading Corp. ... 57

Foster Company, L. B. 40

General American Transportation Corp. 27
General Railway Signal Company 30, 31
German Federal Railroad 50
Graybar Electric Company, Inc. 54
Great Northern Railway Company 43

Hayes Track Appliance Company 42

Kansas City Southern Lines 53

Lehigh & Hudson River Railway Company 46
Louisville & Nashville Railroad 21

New York Central System 12
Norfolk & Western Railway 34
North American Car Corp. .....Inside Front Cover

Rail & Industrial Equipment Co., Inc. 57
Railway Educational Bureau, The 57

Sante Fe Railway 40
Seaboard Air Line Railroad 32
Seatrain Lines, Inc. 44
Southern Pacific Company 55
Southern Railway System 36, 37
Sparton Railway Equipment, Division of Sparton Corp. .. 6
Striegel Supply & Equipment Corp. 57

Texas & Pacific Railway 23
Timken Roller Bearing Company .....Back Cover

Union Pacific Railroad 8
Union Switch & Signal, Division of Westinghouse Air Brake Co. 4

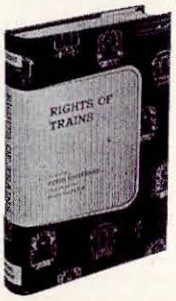
Wyandotte Chemicals Corp. 47

Youngstown Steel Car Company 33

RIGHTS OF TRAINS

by Peter Josserand

New Enlarged
5th Edition



An essential book for operating employees. Analyzes Standard Code of Operating Rules of the A.A.R. Includes CTC, Block Signal and Interlocking Rules. *New data* for telegraph operators and train dispatchers. *Plus* radio and television applications in railroading. 480 pp., cloth, $6.00.

Simmons Boardman Books,
Dept. RA928
30 Church St.,
New York 7, N. Y.

Send a copy of the new 5th edition of *RIGHTS OF TRAINS*

$6.00 herewith ☐; bill me ☐.

Name .....

Street .....

City, State .....

Remit with order and we pay postage.

CLASSIFIED ADVERTISEMENTS

FOR SALE
REBUILT
RAILROAD CARS FOR INTERPLANT USE
GONDOLAS • BOX • FLAT
ERMAN-HOWELL DIVISION
LURIA STEEL & TRADING CORP.
332 South Michigan Avenue
Chicago 4, Illinois
WEbster 9-0500

TECHNICAL TRAINING FOR RAILROAD MEN

Electrical and Mechanical Maintenance of Diesel Locomotives

Diesel Locomotive Operation

Car Work and Car Inspection

Railway Signaling

THE RAILWAY EDUCATIONAL BUREAU
1809 CAPITOL AVENUE
OMAHA 2, NEBRASKA

FOR SALE

Baldwin Diesel Electric 120 Ton, 1000 H.P. Switcher. Rebuilt 1955, less than 2000 hrs. since rebuilt. Bargain Price. STRIEGEL SUPPLY & EQUIPMENT CORP., 307 Jack Street, Baltimore 25, Maryland. Phone ELGIN 5-7922.

KEEP BUYING U.S. SAVING BONDS

1890 ROLLING STOCK

Have requirement for steam locomotive, observation, diner, coach, lounge, and private cars manufactured prior to 1890. Box #900, RAILWAY AGE, 30 Church Street, New York 7, N.Y.

Looking for a job?

Looking for a man?

use this space to
get reliable leads
quicker results

EMPLOYMENT OPPORTUNITIES
SECTION

Railway Age, 30 Church St., New York 7, N. Y.

Are Executives Paid Enough?

There is one place in railroading, anyhow, where the old-fashioned free market still rules—where prices are determined by the interplay of the forces of supply and demand. That place is in the compensation of top executives. No union or regulatory body prescribes such rates of pay—forcing them up to arbitrary levels. If an executive gets $150,000 or $100,000 or $50,000 a year, the only possible reason is that the directors believe that is the figure they must pay—in order to attract the kind of talent these jobs require.

The difference between the cost of a superior executive and a mediocre one is usually the most remunerative expenditure a company can make. The superior performer may cost $25,000 or $50,000 more than the one of limited capacity—but results will show he's worth it.

•

How does the compensation of railroad executives compare with that of executives of other large industries? Are railroad directorates making these positions as attractive money-wise as they should, to acquire and hold the kind of ability railroads need for superior performance? The National Industrial Conference Board has just issued a report on this subject. It surveys the practice of 644 manufacturing and 306 non-manufacturing companies (1957 figures).

In the manufacturing industry, there were 39 top executives whose total compensation was over $200,000. No railroad executive was paid so much. There were 60 manufacturing companies (or almost 10% of the total) whose chief executives received more than $150,000. There was only one railroad (out of a total of 42) that paid more than $150,000.

The *modal average* of the top railroad salaries was in the $75-$100 thousand range; and the modal average in the manufacturing industry also fell into that category. In other words, it could be fairly said that "most railroad executives receive salaries in the same general range as those in the manufacturing industry—but the highest paid leaders in the manufacturing industry get much more than the highest paid railroaders."

The *median average* salary of top executives was $87,000 in manufacturing, $86,000 in retail trade, $80,000 in finance (other than banking and insurance) and $76,000 in railroading. In mining, the median average of top salaries was $72,000; in utilities and insurance, $65,000; and in airlines and other (non-railroad) forms of transportation, $60,000.

Considering the size of the companies, the number of their employees, their volume of sales—there is certainly no evidence here to sustain the slightest suspicion that railroad directorates are paying any more than they have to pay—to get the kind of managers needed by a business as big and complex as the average railroad is.

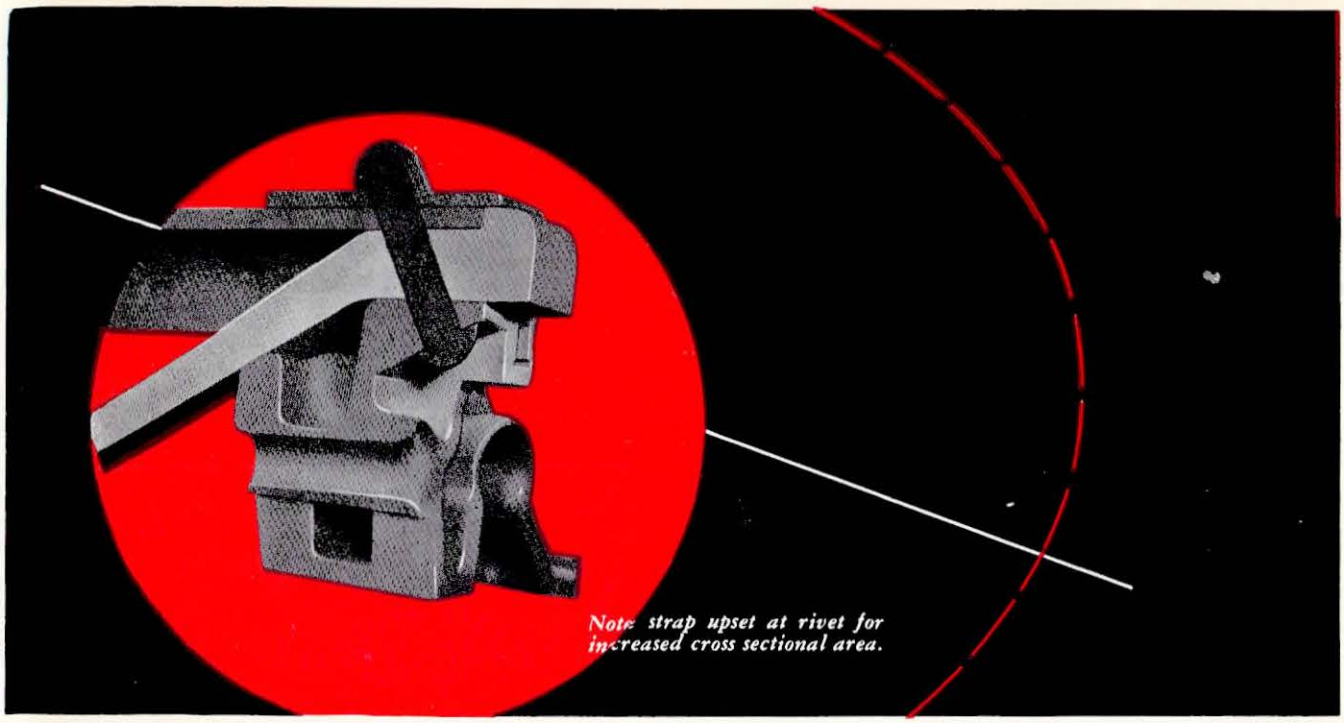
Certainly there is nothing about the "higher bracket" compensation on the railroads which parallels the situation in the "lower brackets"—where, in many communities (particularly semi-rural ones), railroad employees are receiving wages 50% or more higher than employees holding jobs of similar skills in local businesses.

How does railroad pay for the second and third highest-paid executives stack up with the practice of other industries? The median average compensation of the "second man" on railroads was $50,000 (compared to $64,000 in retail trade, $60,000 in manufacturing, $59,000 in finance other than banks and insurance, and $53,000 in mining.) The median in the utilities, insurance, airlines and other (non-railroad) transportation was in the $45-47 thousand range.

The "second man" on the railroads received, on the median average, 35% less compensation than his chief. This was the widest percentage difference between the top and next-to-top compensation of any of the industries surveyed.

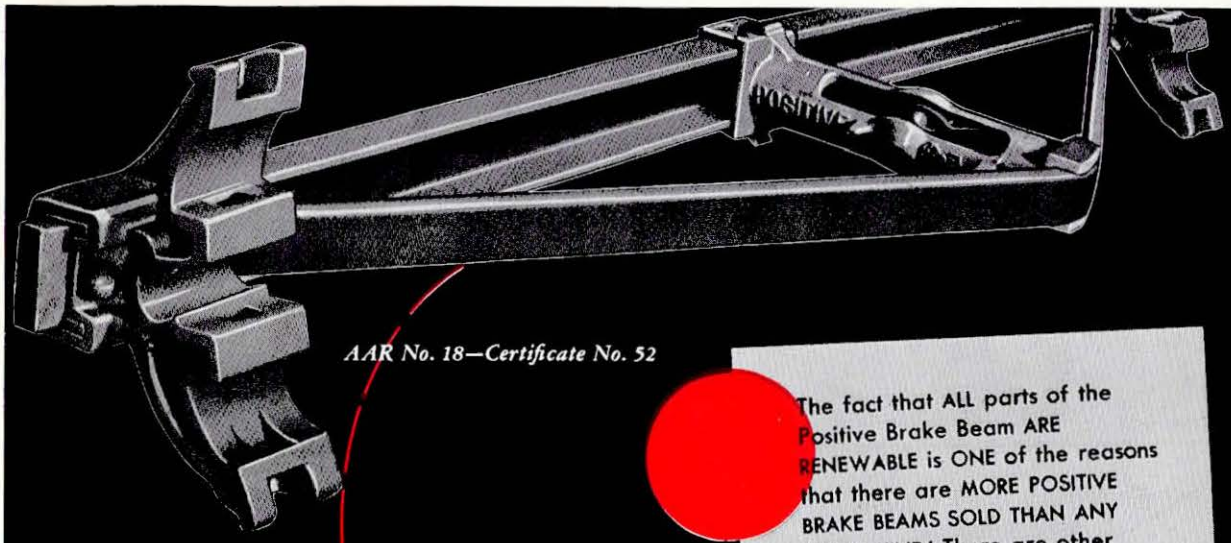
•

TELL THE DIRECTORS: The evidence in this report on the competitive adequacy of railroad executive compensation is pretty conclusive. It shows that directors are certainly not overpaying the top positions, while they may possibly be underpaying the No. 2 spot. The second man is, more often than not, the most likely candidate for the top position—and, if his salary is too far below that at the top rung of the ladder, maybe he won't be around when time comes for him to step up. Directors have no more important duty than that of attracting and holding competent managers, and that duty cannot be well performed without knowing what adequately attractive pay has to be.



Note strap upset at rivet for increased cross sectional area.

ALL *Positive* BRAKE BEAM PARTS ARE RENEWABLE



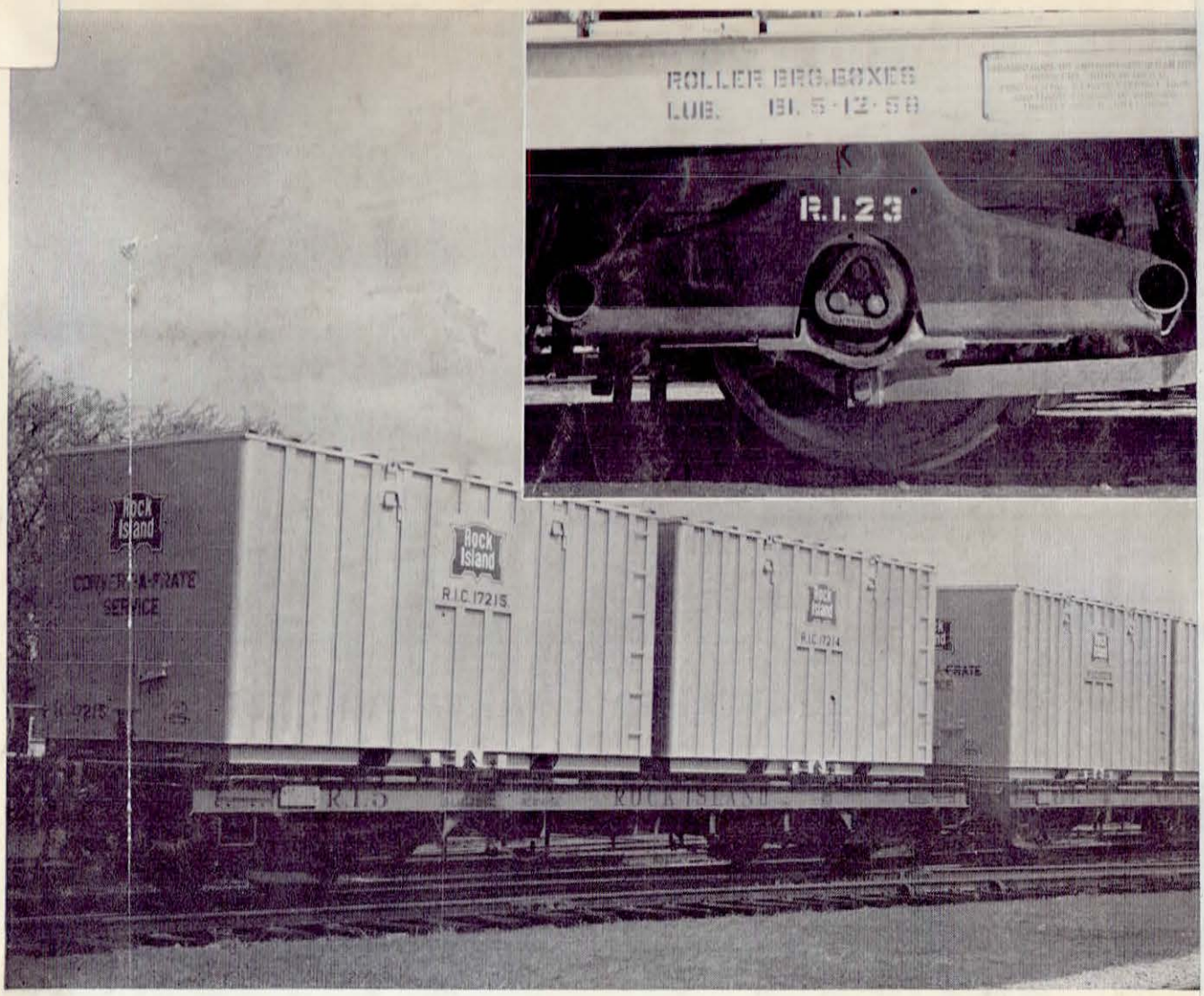
AAR No. 18—Certificate No. 52

The fact that ALL parts of the Positive Brake Beam ARE RENEWABLE is ONE of the reasons that there are MORE POSITIVE BRAKE BEAMS SOLD THAN ANY OTHER KIND! There are other reasons, too . . . *Design* and *dependability* mean higher efficiency for operating men—lower cost on repairs and replacement. The *real* reason is: *real reasoning!*

CHICAGO RAILWAY EQUIPMENT CO.

332 SOUTH MICHIGAN AVENUE • CHICAGO 4, ILLINOIS

C-5



Two ways The Rock Island speeds shipments

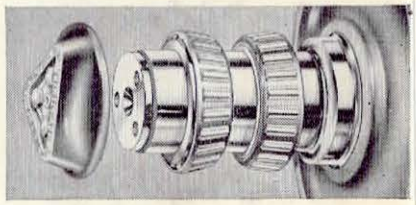
WITH its radically designed Convert-a-frate cargo units, the Chicago, Rock Island and Pacific Railroad is offering new highs in prompt shipments to its customers. With various types of demountable bodies, they cut loading and unloading time—deliver shipments fast at off siding points.

At the terminals, the entire Convert-a-frate cargo unit is lifted off the specially built flat car for delivery to the customer's place of business by truck. Just one handling at origin and destination.

To make sure road efficiency is as great as terminal handling, the Rock Island specified Timken® *tapered* roller bearings for the special flat cars. With Timken bearings instead of friction bearings on the car axles, they've eliminated the hot box problem—No. 1 cause of freight train delays. And Timken bearings speed shipments through terminals, too, because they cut terminal bearing inspection time 90%.

More and more railroads are going "Roller Freight"—putting more and more freight cars of all types on Timken *tapered* roller bearings—to give shippers better, faster, surer shipments. The Timken Roller Bearing Company, Canton 6, Ohio. Cable: "TIMROSCO".

82 railroads and private car owners now have almost 40,000 cars on Timken *tapered* roller bearings . . . 2/3 of them in interchange.



BETTER-NESS rolls on

TIMKEN®

tapered roller bearings

First in bearing value for 60 years